THE GERMAN SCHOOL SYSTEM

BY

SYED ALI AKBAR, M.A. (CANTAB.),
DIVISIONAL INSPECTOR OF SCHOOLS, HYDERABAD, DECCAN

WITH A FOREWORD BY

THE RT. HON. LORD EUSTACE PERCY,
FORMERLY PRESIDENT OF THE BOARD OF EDUCATION, ENGLAND



LONGMANS, GREEN AND CO. LTD.
6 OLD COURT HOUSE STREET, CALCUTTA
53 NICOL ROAD, BOMBAY
36A. MOUNT ROAD, MADRAS
LONDON, NEW YORK AND TORONTO
1932

Dedicated by kind permission to

HIS EXCELLENCY RAJA RAJAYAN RAJA SIR KISHEN PERSHAD MAHARAJA BAHADUR, YAMIN-US-SALTANAT, G.C.I.E., PRESIDENT, HYDERABAD STATE EXECUTIVE COUNCIL

As a humble token of the Author's high esteem of His Excellency's well-known patronage of Learning and Arts and the particularly keen interest which he has always evinced in the educational progress of the Hyderabad State and the general well-being of its Youth.

PREFACE

In 1927, His Exalted Highness the Nizam's Government were pleased to depute me, along with Mr. Syed Mohamed Husain Jaferi, B.A. (Oxon.), Deputy-Director of Public Instruction, to attend the Imperial Education Conference, which was held in London during the months of June and July in that year. In compliance with the orders of Government, I visited Germany at the conclusion of the Conference to study her educational system. I had many handicaps in preparing myself beforehand for my projected visit. In the first place, the time at my disposal was very short. Secondly, I was almost ignorant of the German language. Thirdly, beyond the brief accounts of the German system of education contained in the Columbia University Educational Year-books for 1924 and 1925, Hearnshaw's *Educational Advancement Abroad* and in Roman's *New Education in Europe,* I could obtain but little information in the English language on post-war reforms in German education. Nevertheless, thanks to the help which was generously given me by the Prussian Ministry of Education and the Heads of the various institutions which I visited, I was able within my short stay in Germany in August, 1927, to form a fair idea of the system of public instruction prevailing in that country.

For nearly two years, that is, from 1928 to 1930, I was engaged in supplementing the first-hand information, which I had obtained in Germany, partly by correspondence with the friends I had made in that country and partly by a close and careful study of such literature in English as had become available on the subject since my return from Europe. I am particularly indebted, in this connection, to *The New Education in the German Republic* by Thomas Alexander and Beryl Parker and *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, which contains a translation of *Richtlinien für die Lehrpläne der höheren Schulen Preussens* (Suggestions for the Courses of Study of the Secondary Schools of Prussia) and other official documents and publications. This literature was of invaluable assistance to me in preparing the report of my deputation to Germany, which I submitted to H. E. H. the Nizam's Government in April, 1931. Shortly afterwards, I was commanded by His Exalted Highness the Nizam to accompany his younger brother, Sahebzada Nawab Salabat Jah Bahadur, during the latter's European tour. I thus got an opportunity of paying a second visit to Germany and obtaining first-hand information on the latest developments in the German school system.

I am under a deep obligation to the officers of the Prussian Ministry of Education and the Directors of the schools which I visited in Germany for the uniform kindness with which they received me

and the patience and courtesy which they displayed in answering my inquiries. My cousin, Mr. Mehdi Ali Mirza, B.SC., a student of the Technische Hochschule, Berlin, rendered me great assistance by accompanying me to several schools in Berlin. My warmest thanks are due to my friend Dr. Syed Jafer Husain, PH.D., of the Osmania University, Hyderabad Deccan, for the help which he gave me on my return from my first visit to Germany by translating into English such German literature on the German educational system as I had brought with me from Germany.

I owe a deep debt of gratitude to the following gentlemen for reading the manuscript and offering many valuable suggestions :—

Mr. Syed Mohamed Azam, M.A. (Cantab.), B.SC., F.C.S., Principal, City College, Hyderabad Deccan.

Rev. F. C. Philip, M.A., Warden, St. George's Grammar School, Hyderabad Deccan.

Dr. Franz Hilker, Direktor der Paedagogischen Abteilung Des Zentralinstitut Fuer Erziehung und Unterricht, Berlin.

Professor Walter Helmbold, Weimar.

Dr. Otto Thiele, Oberstudien-Direktor, Köln-Mulheim.

Dr. Heinz Walz, Assistant Secretary, Anglo-German Academic Bureau, London.

Mr. Hosain Ali Khan, M.A. (Oxon), Barrister-at-Law, Professor of English, Osmania University, Hyderabad Deccan.

Had it not been for the help and encouragement which I received from the abovementioned gentlemen, especially Mr. Syed Mohamed Azam, Professor Walter Helmbold and Dr. Otto Thiele, this book would never have seen the light of day.

Finally, I should be failing in my duty if I did not express my grateful thanks to H. E. H. the Nizam's Government for the opportunity they gave me of visiting Germany. I am particularly indebted to them for permitting the publication of the report for the sake of wider publicity and, possibly, some usefulness.

S. ALI AKBAR

HYDERABAD, DECCAN,
15*th December*, 1931

FOREWORD

Mr. Ali Akbar is known as a distinguished servant and student of education, not only in India, but also in England where he rendered most valuable assistance to the deliberations of the Imperial Education Conference of 1927. The careful study of German education which he has made in this book will be of great interest to all who are concerned with education in India, and I hope it will be widely read.

Germany has long been recognised as a pioneer nation in the educational field, and it is worth while to consider to what quality she owes this position. I doubt whether her primary or secondary, or even her 'technical', schools are superior to-day to the corresponding schools in other countries. Even her universities can lay claim to no assured pre-eminence. On the whole, I think that English education is better than German and contains, moreover, more promise of future progress. But Germany possesses one quality to which Dr. Flexner has drawn attention in his recent book on American, English and German Universities: she has a conscious grasp of what education is and ought to be. France has the same quality, perhaps in an even greater degree, in the comparatively narrower sphere of humanistic secondary education; but Germany shows it over the whole field of education. She has

standards, she has a philosophy; while other nations, notably England, are content to work out their educational salvation empirically, as the needs of their people seem from time to time to require.

It is this quality which comes out, I think, in Mr. Akbar's study. This is the lesson which Germany has to teach, both to India and to England, and also to the British Commonwealth of Nations as a whole. We have a cultural inheritance older, richer and more varied than that of Germany, and it is the more necessary that we should learn from her the power of focussing that inheritance into a philosophy comprehensive enough to include its varieties and to develop it to meet the demands of a changing world.

EUSTACE PERCY

CONTENTS

CHAPTER VII

SECONDARY SCHOOLS

CHAPTER VIII

THE TEACHING OF ENGLISH

CHAPTER IX

THE TEACHING OF HISTORY AND GEOGRAPHY

CHAPTER X

TEACHING OF MATHEMATICS AND THE NATURAL SCIENCES

CHAPTER XI

Drawing and Music

CHAPTER XII

CHAPTER XIII

CHAPTER XIV

CHAPTER XV

Welfare of School Children

CHAPTER XVI

Teachers

CHAPTER XVII

INTRODUCTION

THE COUNTRY, ITS PEOPLE AND GOVERNMENT

GERMANY has an area, approximately, of 182,000 square miles and a population of a little over 63 millions, of whom nearly 62 per cent. are Protestants. She is predominantly an industrial country and manufactures iron and steel goods, cotton, woollen and silk cloth, glass, leather, paper, clocks and wooden ware. The chemicals, dyes and toys made in Germany are famous all over the world. She has good coalfields, and iron, zinc, copper and lead mines. The principal crops are wheat, rye, barley, oats, sugar beets and potatoes. About 38 per cent. of the population is engaged in industry, 32 per cent. in agriculture and forestry and 12 per cent. in trade and transport. The natural resources of the country are limited and the climate in many parts is characterised by short summers and long winters. Struggle with these difficulties has given the Germans those qualities of industry, application, perseverance, courage, inventiveness, enterprise and, above all, organising capacity, which have placed them in the front rank of nations.

The present Federal Republic came into existence after the Revolution of 1918, which overthrew the monarchy. It consists of 17 States,

the largest being Prussia with a population of about 39 millions. Each State has a legislative body called the *Landtag*, which has the right to legislate in internal matters so long as such legislation conforms to the Federal Constitution. As in the days of monarchy, Prussia is still the most influential State. The Republic has two legislative bodies, the *Reichstag* and the *Reichsrat*, composed, respectively, of the representatives of the people and those of the States. The *Reichstag* is the more important of the two bodies, the main function of the *Reichsrat*, or the upper house, being to safeguard the interests of the various States. The head of the Executive is the President, who is elected for 7 years and is eligible for re-election. There is also a Cabinet of Ministers led by the Chancellor, who is responsible to the *Reichstag*.

BRIEF HISTORICAL SKETCH OF THE PROGRESS OF EDUCATION IN GERMANY TILL THE REVOLUTION OF 1918.

It has been truly said that no country in the world has devoted more thought to education in all its branches and varied aspects than Germany. Germany was the first country to recognise and enforce the principle of compulsory primary education, and, consequently, she attained universal literacy earlier than any other nation in the world. Though small beginnings in popular education had been made in some of the minor German States

as early as the 17th century, the first definite step towards compulsory school attendance was taken by Prussia in 1717, when Frederick William I. ordered all parents to send their children to school where schools existed. Prussia's concern for education became even greater after her defeat by Napoleon in 1806. Stein and Humboldt immediately set to work to reorganise the educational system with the aim of building up national unity. During the first 40 years of the 19th century, new universities were founded, several training institutions for teachers were established and the Leaving Examination of the *Gymnasium,* or high school, was reformed. In 1834, great impetus was given to secondary education by making it compulsory for candidates for the learned professions as well as for the civil service to pass the Leaving Examination of a *Gymnasium*. Still more rapid strides were made in education after the attainment of national unity and the foundation of the Empire in 1871. With the advance of industrialism, the material and economic needs of the country led to a remarkable development of vocational and technical education and helped to secure for the new types of high schools for science and modern languages the same privileges as those which had for nearly three centuries been enjoyed by the classical *Gymnasium*. At the same time, the universities did much to promote scholarship and scientific research. As a consequence of the attention which Prussia, and, in her wake, the other German

States, paid to all aspects of education in the 19th century, long before the Great War, Germany had become deservedly famous among the nations of the world for her achievements in all branches of knowledge and for the general high standard of education attained by her citizens.

Aim of Education before the War.

With all its thoroughness and efficiency, the system of education in Germany before the War was characterised by too great a formality and rigidity and did not allow sufficient scope for initiative. The schools were maintained primarily in the interests of the State, which, according to Hegel's political philosophy, was considered to represent the highest good. They aimed mainly at intellectual training and training in German citizenship, which in those days meant training in obedience, loyalty and respect for authority. Consequently, the courses of study as well as the methods of instruction were characterised by strict regimen and uniformity, and the greatest stress was laid on formal discipline and submission to authority. Discussing the characteristics of the system of education prevailing in Germany at the beginning of the 20th century, Dr. James Russell made the following significant comments in his book *German Higher Schools* :—

'The rigorous discipline of the schools, which brooks no opposition and tolerates no parental interference ; the methods of instruction, which leave nothing to chance and individual initiative ;

and the system of privileges, which dominates teachers and pupils alike—all tend to the development of a character which feels no restriction of personal liberty in the constant surveillance of the police and the rule of a military despotism. The social institutions, the school system and the methods of instruction in Germany are calculated to beget dependence on authority rather than independence and freedom of action.'

Post-War Reforms in Education.

Before the War, there were two movements which had a great influence on the educational reforms that were introduced after the Revolution —the *Jugendbewegung* and the *Landerziehungsheime*. As will be explained in Chapter XIV, the *Jugendbewegung*, or the Youth Movement, arose as a protest against the bookish atmosphere and the rigorous discipline of the schools and aimed at giving the pupils greater freedom in their lives. The other movement, the *Landerziehungsheime*, was started by a practical educational reformer, named Herman Lietz, who, influenced by the doctrines of Rousseau, Herbert Spencer, Auguste Comte and Froebel, founded, between 1898 and 1904, three private schools which had for their object not merely the training of the mind but of mind, body and soul together and which sought to provide an atmosphere in which the growing boy could achieve complete and harmonious development.

The chances of reform in the educational system of the country were small so long as the spirit of the administration remained what it was; but, when Prussian militarism was overthrown, the way was cleared not only for political but educational reconstruction. In 1919, the question of educational reform engaged the special attention of the framers of the Weimar Constitution, who felt that, if democracy was to endure, it was necessary that the very spirit of the educational institutions should be altered. So great was the importance attached by them to the need for reorganising the educational system of the country, that they inserted ten articles in the Federal Constitution outlining the new educational policy.

The whole aim of education was changed. It was laid down in the Federal Constitution that 'in every school, the educational aims must be moral training, public spirit, personal and vocational fitness, and, above all, the cultivation of German national character and of the spirit of international reconciliation'. This enactment has had important and definite results. In the first place, it has given the schools a much larger measure of freedom as regards internal organisation and disciplinary rules than they had ever enjoyed before. Each State, no doubt, still prescribes the courses of study, but they are much more elastic than before, and, in framing them, the authorities concerned pay due regard to the personality of the teacher. 'Suggestions (*Richtlinien*) for Courses of Study in Schools' have now taken the place of

the rigid regulations which used to be issued before the War. Secondly, it is now recognised that what the schools have to aim at is not merely intellectual training, but the development of the personality of the child and of his individual capacities. Thirdly, civic education has been made part of the curricula of the schools. Fourthly, while German culture is still emphasised in all the schools, the spirit of exclusive nationalism, which was their outstanding characteristic before the War, is no longer encouraged. How far, in practice, this 'spirit of international reconciliation' has been actually inculcated in the German schools is difficult to assess. It is, nevertheless, a noteworthy fact that, in spite of there still being in Germany quite a considerable and influential body of teachers possessing the old nationalistic spirit, systematic attention is now being paid to the study of modern foreign languages in German secondary schools and efforts are being made to teach the pupils to understand and appreciate foreign culture by means of correspondence with foreign students, visits to foreign countries, and, last but not least, *Kulturkunde* school books dealing with foreign countries (i.e., school books imparting information about foreign nations and their culture).[1] In the long run, all this must help

[1] A special Correspondence Bureau has been formed at Leipzig in recent years to give encouragement to and provide facilities for German pupils to establish friendly relations with foreign pupils through correspondence. There is also a special Bureau in Berlin called the *Deutsche Padagogische Auslandstelle,* which seeks to promote friendship between the German and foreign pupils by arranging for the exchange of individual pupils, and sometimes of

in the promotion of international understanding and goodwill.

Another important provision in the Constitution is that, throughout Germany, all children during their first four school years, i.e., from 6 to 10 years of age, shall attend the same type of public elementary school. As a result of this regulation, private schools and preparatory classes attached to the secondary schools, which formerly used to prepare the children of the upper and middle classes for admission into the high and middle schools, have ceased to exist. The aim of the Common School Law is to give similar opportunities to children of all classes in the initial stage. The first four years of the *Volksschule*, or public elementary school, have been organised as a basic school (*Grundschule*) common to all. The Federal Constitution provides that middle and secondary education should be built up organically on the basis of the *Grundschule*, and that, after the first four years, the kind of education which a boy is to receive should depend, not so much on his economic and social position or the religious belief of his parents as on his own ability and aptitude. The States and the municipalities are required to grant scholarships to promising students in poor circumstances to enable them to

a whole class. In 1931, the Bureau organised a camp on the Baltic Seas for German, English and Norwegian girls and arranged for lessons, excursions, swimming, physical exercises and games. At about the same time, a group of German boys visited England and camped with English boys at Bradford, Southend and a few other places.

attend a middle or secondary school. Thus the law mentioned above has not only given greater unity and uniformity to educational organisation, but has democratised the system of education and removed many obstacles in the way of national solidarity.

The Revolution has affected not only the elementary schools, but also the middle and secondary schools, which have now been so reorganised as to satisfy more effectively the social and economic conditions of the country. Part-time education in a vocational school has been made compulsory for all young employees between 14 and 18 years of age, while additional facilities for receiving secondary education have been given to talented children in rural areas by making it possible for such children to join a special kind of secondary school, called the *Aufbauschule,* at the age of 13.

While training in citizenship is still an important aim of the schools, this training now means training in responsibility and leadership rather than in obedience and submission to authority. The students' self-government movement has been introduced in all the secondary schools, and there are also students' clubs and societies for organising games, debates, dramas and other analogous activities.

The democratic principles which lie at the root of the post-war school reforms in Germany have been applied to the teaching profession also. The Federal Constitution provides that the opportunities for training given to teachers in the elementary

schools shall be similar to those enjoyed by the secondary school teachers. As a result of this law, the normal schools which formerly used to train teachers for elementary schools have been abolished everywhere except in Bavaria and Wurtemberg. Now, all those who wish to become teachers in the elementary schools are required to pass the Leaving or 'Maturity' Examination of a high school and thereafter to undergo training either in the special pedagogical academies which have been established in many States in recent years, or in a university. All teachers in public schools have the rights and duties of state officials, and the value of the service of teachers in the elementary schools is considered to be as great as that of teachers in the secondary schools.

The clauses in the Federal Constitution pertaining to religious instruction reveal the same liberal tendency of the new educational policy. Religious instruction continues to be part of the regular school curriculum and provision for it is made in all schools, but a teacher is not compelled to give such instruction, and whether a child shall receive it or not depends upon the will of the parents.

The influence of the movements for school reform which preceded the War is to be seen clearly in the new curricula and syllabuses of the various grades and types of schools. The main features of the reforms which have been introduced in this connection are as follows :

(1) The burden of school work has been lightened by a reduction in the number of hours as well as in the number of subjects.

(2) Greater correlation has been established between the different school subjects, with German culture as the central and predominating theme.

(3) Instruction on the basis of self-activity on the part of the pupils and co-operation between the teacher and the taught has taken the place of the intellectual drill and mechanical work which were so common before the War.

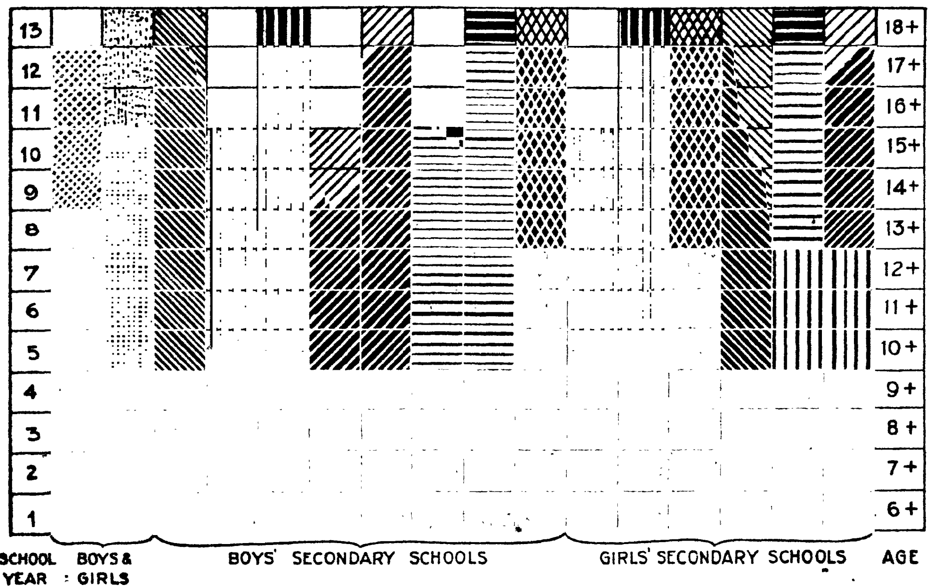
(4) Physical education has been given an important place in the programme of all schools.

(5) School excursions have been made compulsory.

These changes have resulted in giving the pupils greater creative freedom and in bringing school work into closer harmony with actual life.

In the following pages an attempt has been made to give an account of the various aspects of the German school system, with personal impressions of the institutions visited. It must be pointed out, at the very outset, that this account is only roughly applicable to the whole of Germany, for, as will be explained in Chapter I, while the general principles followed are the same throughout Germany, some of the details have been worked out differently in different States.

CHART ILLUSTRATING THE ORGANISATION OF SCHOOLS IN GERMANY



Volksschule or Public Elementary School; *Grundschule* 4 years and Upper Section 4 years.

 *Mittleschule* or Middle School; 6 years' course with vocational bias.

 Part-time Continuation or Vocational Schools for employees between 14 and 18 years of age.

 Full-time Trade, Commercial and Technical Schools; two to four years' course.[1]

 *Deutsche Oberschule* (9 years): Secondary School emphasising German literature, art and history.

 *Realschule* and Girls' *Lyzeum* (6 years), *Oberrealschule* and Girls' *Oberlyzeum* (9 years): Secondary Schools with two modern languages emphasising science and mathematics.

 *Pro-realgymnasium* (6 years), *Realgymnasium* (9 years) and *Realgymnasiale Studienanstalt*[2] (6 years): Secondary Schools with Latin and two modern foreign languages.

 *Progymnasium* (6 years), *Gymnasium* (9 years) and Girls' *Gymnasiale Studienanstalt*[3] (6 years): Secondary Schools with Greek, Latin and one modern foreign language.

 *Aufbauschule* (6 years): Secondary School admitting boys and girls after 7 years' attendance in the *Volksschule* and organised either as an *Oberrealschule* or *Deutsche Oberschule*.

[1] *N.B.* After the completion of the Middle School course, a student with an academic bent may be admitted into a Secondary School without Latin.

[2] *Lyzeum* 3 years, *Real-gymnasiale Studienanstalt* 6 years.

[3] *Lyzeum* 3 years, *Gymnasiale Studienanstalt* 6 years.

CHAPTER I

ADMINISTRATION AND ORGANISATION OF SCHOOLS

A. Administration of Education.

UNTIL the Revolution, the different German States were free to follow any educational policy they liked, so long as they enforced the law of compulsory school attendance and maintained, as far as possible, equal standards in the award of the final secondary school certificates. There was no comprehensive education law. In actual practice, however, in the matter of educational administration, as in other matters, the example of Prussia was followed by the other States, so much so that the Prussian system of education came, in course of time, to typify the system of education in Germany as a whole.

Since the Revolution, the Federal Government has reserved to itself the right to prescribe the general principles which are to govern the whole educational system of the country. While giving this power to the Federal Government, the Weimar Constitution has no doubt left the actual conduct of the schools to the States, each of which has the right to pass detailed legislation and organise its school system under the provisions of the Constitution. But the general principles laid down in the Constitution, coupled

with the legislation passed by the Federal Government in recent years and the establishment of a Federal School Board, have tended to introduce greater uniformity in the systems of education of the various States than was the case before the Revolution. The clauses in the Federal Constitution dealing with education refer, *inter alia,* to compulsory education, *Grundschule* (first four years of elementary education), religious instruction, adult education, the participation of local bodies in education, the training of teachers and the recognition of private schools.

The whole of the school system is under the control of the State. In each State, the central authority for the administration of education is the Ministry for Science, Art and Education, which issues regulations and suggestions regarding the courses of study, regulates tuition fees, controls examination requirements and standards, approves text-books and school materials, supervises the training of teachers and fixes their salaries, provides funds for education and appoints the higher officials in the various branches of educational service. The Ministry of Commerce and the Ministry of Agriculture supervise, respectively, industrial and commercial education and agricultural education, while the Ministry of Public Health organises child welfare and co-operates with the Ministry of Education in the supervision of schools for defective children and in the medical inspection of schools. Local bodies have also an important share in the administration of education.

In each province there is a provincial school board, composed of educational experts and others interested in education, which participates in the supervision of secondary education. There is, besides, in each district, a district school board which appoints teachers in the elementary and continuation schools and supervises such schools. In big towns, the municipalities exercise their educational functions with the advice of a board composed of representatives of the town council, the teaching profession and the Parents' Council.

The responsibility for providing funds for schools is divided between the State and the local authorities. The latter generally meet the cost of buildings, materials and medical inspection, while the State bears the major portion of the burden for the salaries of teachers, and sometimes, as in Bavaria, the entire burden. The State does not levy any special educational tax, the cost of education being met out of the general public funds. The proportion of the expenditure on education to the total budgeted expenditure in a State varies from 20 to 30 per cent. In Prussia, the annual cost of education per pupil is roughly £22 10*s*. in the secondary schools for boys, £13 10*s*. in the secondary schools for girls, £8 5*s*. in the middle schools and £6 in the elementary schools.

Inspection.

Before the War, an active share in the inspection of schools situated in rural areas and small

towns used to be taken by the clergy, who, apart from lacking the necessary qualifications for the satisfactory performance of this work, could not even devote sufficient time to it. The Federal Constitution did away with this practice by providing that the 'supervision of schools shall be carried on by technically trained officials who are mainly occupied with this duty'.[1] Now, all the Inspectors of Schools are professional experts appointed by the Ministry of Education. For the inspection of secondary schools, there is a board of inspectors for each province, the number of inspectors depending on the size of the province. As will be shown in Chapter XII, the duties of these inspectors include, besides inspection, the conduct of the final examination of each high school in their jurisdiction and also of the final examination of prospective teachers of secondary schools, both in theory and practice. For purposes of inspection of the elementary and middle schools, the administrative districts are divided into appropriate inspection districts, each district being placed under an Inspector appointed by the Minister of Education. This office is open to teachers of elementary and middle schools, and the tendency is to select men with school experience and sound and expert knowledge, in preference to those who merely possess university degrees. The Inspectors of Elementary and Middle Schools are responsible for the supervision

[1] The German Federal Constitution, Section 4, Article 144.

of all elementary and middle schools—public as well as private—and of rural continuation schools. They approve courses of study, conduct conferences of teachers, advise school committees, and supervise the work of teachers whom they are empowered to admonish, and, if necessary, even to reprove.

With the growth of the idea of freedom for teachers, the Inspector's conception of his duties has changed considerably in recent years. He is no longer the bureaucrat that he used to be before the War. He concerns himself mainly with administrative detail, and, if he finds any defects, he discusses them with the headmaster or with the teachers concerned and offers helpful advice in a friendly manner. After each inspection, he generally holds a conference of the teachers of the school concerned and discusses with them such points regarding teaching methods, internal organisation and discipline as may have arisen in the course of his inspection.

B. Organisation of Schools.

The Federal Constitution requires that throughout Germany all boys and girls between 6 and 14 years of age shall attend a full-time school, and that such of them as are not in a middle or secondary school or a full-time technical or commercial school at the completion of their 14th year, shall receive part-time education in a continuation or vocational school up to the completion of the 18th year. No fees are levied either in the elementary

or continuation schools. The Constitution also provides that school materials should be given free in these schools, but, in practice, they are generally supplied gratis only to the poor and needy children.

There are kindergartens all over the country for children under 6 years of age, but attendance in these institutions is voluntary. In fact, strictly speaking, they do not form part of the official school system, being under the control of the Department of Juvenile Welfare.

As already stated, all children between 6 and 10 years of age are required by law to attend the *Grundschule*. At the end of this period, a pupil may either continue in the *Volksschule* for four more years, that is, until the completion of his 14th year, or join a middle school with a 6 years' course, or a secondary school with a 6 or 9 years' course. Previous to the Revolution, a pupil could obtain admission into a *Gymnasium*, or secondary school, after three years of preliminary preparation in a *Vorschule*, or preparatory school; but now, as all children are compelled to receive their education in the *Grundschule* during the first four years and as all private preparatory schools have been abolished, it takes 13 years for a student to qualify himself for entrance into a university. It is, however, possible for specially gifted children to complete the high school course in 12 years from the date of their joining the *Grundschule*, for such children may, on the recommendation of their teachers and with the approval

of the Inspector, be admitted to a middle or high school after 3 years' attendance in the *Grundschule*.

The post-war reforms in Germany have not only linked up the lower grades of the elementary school with the middle and secondary schools, but they have made the transfer of pupils from the upper grades of such a school to a secondary school possible by the establishment of *Aufbauschulen* in small towns. These secondary schools have a 6 years' course leading up to the university standard and admit boys of exceptional ability who have attended a *Volksschule* for seven years.

The middle schools are mainly pre-vocational schools. It is possible for boys and girls with an academic bent to join a high school after they have attended a middle school for 6 years; but after leaving a middle school, the vast majority of the pupils either take up employment and attend a continuation or part-time vocational school for 2 years or join a full-time technical or professional school.

The main types of high schools are :—(1) the classical *Gymnasium* with emphasis on Greek and Latin; (2) the *Realgymnasium*, which teaches Latin, but not Greek, and emphasises modern languages; (3) the *Oberrealschule*, which teaches neither Latin nor Greek, but lays stress on modern languages, science and mathematics, especially on science and mathematics; and (4) the *Deutsche Oberschule*, which emphasises the social sciences

and German language and culture.[1] There are also six-year secondary schools, known as the *Realschule*, *Progymnasium* and *Realprogymnasium*, which teach the first six years' syllabuses of the *Oberrealschule*, *Gymnasium* and *Realgymnasium* respectively. Success in the Leaving Examination of a fully developed secondary school with a nine years' course is necessary for admission into a university for higher studies in arts, engineering, agriculture, forestry, mining, law or commerce.

The facilities given to women for higher education now correspond to those enjoyed by boys. The secondary schools for girls are the *Lyzeum*, *Oberlyzeum*, *Gymnasiale Studienanstalt*, *Realgymnasiale Studienanstalt*, *Deutsche Oberschule* and *Aufbauschule*, offering courses similar to the schools for boys known respectively as the *Realschule*, *Oberrealschule*, *Gymnasium*, *Realgymnasium*, *Deutsche Oberschule* and *Aufbauschule*. The *Lyzeum* is built up on the basis of the *Grundschule* and provides a six years' course, after completing which a girl may receive secondary education for three more years and then enter a university, or she may join a Trade or Commercial school, or a *Frauenschule*, which gives two to three years' training in household management, child welfare work and kindergarten work.

[1] The *Reformgymnasium* and the *Reformrealgymnasium*, which are modifications of the *Gymnasium* and the *Realgymnasium*, respectively, are described in Chapter VII.

Private Schools.

In Germany, the State takes cognizance of all education, public as well as private. Private schools are required to receive the approval of the State and are subject to its laws. Permission for the opening of private schools is granted only if their standard as regards courses of studies, equipment and qualifications and economic and legal status of teachers is not lower than that of public institutions. All private elementary schools are required to provide free education and are forbidden to make any discrimination against children on the ground of the social and economic status of their parents.

Private schools are rare in Germany. Such private schools as do exist are of the following types :—

(*a*) *Kindergartens* for children below 6 years of age.

(*b*) *Sectarian schools.* These are allowed where there is a sufficient number of children belonging to a minority religious denomination.

(*c*) *Schools for Political Minorities* such as the Poles and the Danes, where the media of instruction are the Polish and Danish languages respectively.

(*d*) *Experimental schools.* In order to encourage new experiments in the field of education, experimental schools are given freedom to follow their own curricula and time schedules. Among the experimental schools, the most important are

the *Landerziehungsheim* and the Community schools of Hamburg. As already stated, the *Landerziehungsheim* (country educational homes) owe their origin to Herman Lietz. After his death in 1919, a society known as the *Stiftung Deutsche Landerziehungsheim* was founded, which maintains about two dozen *Landerziehungsheim* to-day. All these institutions are situated in the country, and, unlike most other schools in Germany, they have boarding houses attached to them. A number of the *Landerziehungsheim* are of the secondary grade, following the curriculum of a *Gymnasium,* a *Realgymnasium* or an *Oberrealschule.* Farm work, manual training, physical education, excursions and music and folklore are emphasised in all the schools maintained by the above society.

The community schools of Hamburg are elementary schools which enjoy freedom from all official regulations. The parents as well as teachers have a large share in the administration of these schools. The headmaster receives no extra salary, and is elected for a period of three years, on the expiry of which he reverts to the position of assistant-master. Other interesting characteristics of the community schools are absence of religious instruction, co-education, self-government of the scholars, active and living co-operation of the teachers and the pupils on the basis of equality and comradeship and the establishment of intimate relations between the parents and the school. The aim is the development of

the individual capacity and personality of the child through self-education and the cultivation of social sympathy in him by encouraging him to perform, as a matter of habit and pleasure, simple duties towards his fellow-students and the school as a whole.

Some of the principles followed by the community schools have already penetrated into other schools. For example, the director of a public elementary school enjoys no higher status than the other members of the staff. Nor is the close co-operation of parents and teachers peculiar to the community schools, as Parents' Councils have become common all over Germany, though it is only in Hamburg where they have a share in the control of the schools.

Number of schools and scholars according to grades of institutions.

In 1927 the number of schools of different types and their respective enrolments were as follows :—

Type of School	Number of Schools	Number of Pupils
Public Elementary Schools ...	52,785	6,659,769
Private Elementary Schools ...	572	36,991
Continuation and Trade Schools ...	29,652	2,507,028
Middle Schools	1,548	259,070
Secondary Schools (Boys) ...	1,924	553,258
Secondary Schools (Girls) ...	934	292,293

Roughly estimated, 6½ per cent. of the boys and 6 per cent. of the girls in the elementary schools

pass into the middle schools, 23 per cent. of the boys and 17 per cent. of the girls proceed to the secondary schools, while the remaining pupils continue their education in the elementary schools up to the age of 14.

Adult Education.

The establishment of the Republic has given a strong impetus to the movement for adult education which began in Germany more than half a century ago. For the success of the new democracy, it was felt necessary that extended opportunities for liberal education should be given not only to boys and girls under 18 years of age, but to adults who have already entered life, and who, on account of their age and occupation, cannot attend the ordinary middle or secondary schools. The Weimar Constitution recognised this need by providing that the Federal Government, the States and the municipalities should promote popular education, including People's Universities or Folk Colleges (*Volkshochschule*). These institutions are so called because they are managed by the people themselves with the minimum of control by the State. Almost every big town in Germany can now boast of a *Volkshochschule*. The classes are held in the evening. A small fee is charged, but, as the income derived from this source is never sufficient to meet the expenditure, the States and the municipalities extend their support to the Folk Colleges in the shape

of grants and such facilities as the use of the school and university buildings and furniture.

The lectures organised by the Folk Colleges cover a wide range of subjects, including German literature, history, science, economics and political science. Lectures are generally followed by discussions. The instruction thus given is supplemented by visits to museums and the use of public libraries, which provide special facilities for the pupils of adult schools. The Folk Colleges neither hold any examinations nor award any certificates and diplomas, their aim being solely to offer education for its own sake.

Berlin, Cologne and four or five other towns have opened evening secondary schools of the *Deutsche Oberschule* type, which prepare young men and women in active employment for entrance into a university. Candidates seeking admission into an evening secondary school (*Abendgymnasium*) must be at least 19 years of age and must give satisfactory proof of their ability to benefit by secondary education. For those who have received only elementary education previously, the course extends over a period of five years. No fees are levied.[1]

Besides the People's Universities, residential Folk Colleges of the type of the well-known Danish Folk Colleges have sprung up in Germany in recent years. They admit young

[1] When the writer visited Cologne in September, 1931, he learned that, owing to the financial stringency, the town had decided to close down the adult high school there.

men and women between eighteen and twenty-five years of age, and give them a course of intensive instruction for three or four months in subjects in which they are especially interested. The authors of the *New Education in the German Republic* describe the aims of these schools as follows :—

'The homes are designed to meet the special needs of young men and women from eighteen to twenty-five years of age, when they are just starting out in life and trying to make some connection between the facts they were taught in schools and the ideas they meet in the world. The Folk College Home tries to help them through this period of orientation by bringing them into close touch with older people and leaders of their own age, so that they may thresh out their common problems in conversation while they are at work in the household and gardens, enjoying sports and festivals, or joining in courses of instruction and field trips.'

CHAPTER II

THE KINDERGARTEN.

THE kindergarten (children's garden) is an institution intended for the benefit of children between 3 and 6 years of age, and aims at providing a sound foundation for regular school work. It trains the senses of the child and develops self-activity, self-expression and social co-operation through his natural instincts of play. Froebel (1782-1852), the founder of this system, invented a series of play-things and gifts so designed and arranged as to train the child systematically in the fundamental sense impressions. It is now realised that what is important is not so much the gifts themselves as the ends which they are intended to serve, *viz*. the gradual development of the impulses that have an educational value, especially the impulses to express and create. Accordingly, with the advance which Child Psychology has made in modern times, many new gifts and games have been added to those which were in use in Froebel's days. Moreover, pre-school education in Europe has been considerably influenced in recent years by the methods recommended by Dr. Montessori, especially by the principle of freedom of the child, on which she lays so much stress. Nevertheless, the Froebelian doctrines still hold sway in the German kindergartens, though an

attempt is also made to combine them harmoniously and appropriately with the Montessori method. The general opinion in Germany regarding the Montessori apparatus is the same as in England, namely, that while this apparatus is useful, especially for backward children, the teacher must be given freedom to use such other material as she may find necessary for developing self-activity in individual children.

Germany may rightly be called the home of the kindergarten. Froebel founded the first kindergarten at Blankenburg, Germany, in 1837. Since then, kindergartens have been established in Germany in all towns, and in many cases, in rural areas also. They are private institutions aided by the municipalities, which sometimes bear the cost of the salaries of the teachers, leaving the private agencies to supply the buildings and equipment. As mentioned in Chapter I, the kindergartens are controlled by the Department of Juvenile Welfare. They serve both as centres for child-welfare work and for preparation for the elementary school. Some kindergartens also take in children of the school age whose mental development has been retarded by temporary causes, and, by entrusting them to the care of a specially trained teacher, prepare them for admission into an elementary school.

Like the Nursery Schools in England, the kindergartens in Germany are a great boon to families where the father and mother, being both obliged to go out to work, cannot look after their

children during the day. In big towns there private kindergartens with high fees for the c dren of well-to-do parents. Where there are or more children in a rich family, a woman the kindergarten training certificate is sometimes engaged to educate them at home until they reach the age of six.

The most famous institution in Germany for the care and education of children of pre-school age and the training of girls for kindergarten and child-welfare work is the Pestalozzi-Froebel Haus in Berlin, which was founded in 1873 by Madame Schrader, Froebel's niece and co-worker. The writer had the privilege of visiting this institution during his stay in Berlin in 1927. The school has a beautiful garden which contains, besides plants, domestic animals and birds. Play is combined with work, and, weather permitting, the children spend much of their time in the garden. It was a delightful sight to see the children feeding the animals, watering the plants and playing organised games in the sand pile. No less cheerful was the appearance of the class-rooms, which were tastefully decorated with suitable pictures of animals, plants and children engaged in play. There were also to be seen plasticine and paper models and a number of other little things made by the children. There was no lack of apparatus, and when the writer asked the Directress of the school where she had obtained the apparatus from, she answered in English, 'Why, we make our own apparatus'. The variety and the exquisite



By permission

A Handwork Class, Pestalozzi-Froebel Haus, Berlin

workmanship of the apparatus cannot fail to impress one with the all-round training given to kindergarten mistresses in Germany.

Children of different ages are grouped together at work, at play and at meals, and an attempt is made to create and foster the family atmosphere. The kindergarten is conducted mainly on the principles advocated by Pestalozzi and Froebel; but, at the same time, the importance of the later doctrines and methods is not lost sight of. One of the members of the staff was trained in the Montessori method by Dr. Montessori herself, and in the school building there is a room called the Montessori Room which has been set apart for the Montessori apparatus. In fact, the influence of Dr. Montessori's doctrines is apparent in the entire work of the kindergarten. Great stress is laid on teaching the children self-help and co-operation. The teacher never does anything for them which they can do themselves. Like the Montessori teacher, she plays the part of a guide and supervisor rather than of an instructor.

The Pestalozzi-Froebel Haus has, besides a kindergarten, a crèche and training classes for future kindergarteners and child-welfare workers. The girls receiving kindergarten training render valuable help to the members of the staff, under whose guidance, they teach the children and look after them at play as well as at dinner. Special attention is paid in the kindergarten as well as in the crèche to the personal cleanliness of the

children, and the arrangements for washing and bathing leave nothing to be desired. Every child is bathed and examined medically once a week. Children of weak physique are sent away for a period of six weeks to a country home owned by the institution.

There is a special class in the Pestalozzi-Froebel Haus for backward children. Some of the children in this class were over six years of age and were being taught to read and write by special methods. The total number of children in all the sections of the Pestalozzi-Froebel Haus is nearly 1,000.

In another kindergarten which was visited, a group of children was seen to be using the Montessori apparatus. But there were at least four other groups. One was occupied with the colour discs, another with games, a third group was engaged in action songs and a fourth one was looking after the plants in the garden. Each group consisted of about twenty-five children. In teaching the children in groups, the school was following Froebel, for Dr. Montessori emphasises the importance of individual attention and recommends that the children should be given freedom, within certain limits, to choose their own occupations and to do them for as long or as short a time as they please.

The Froebelian Society does valuable work in promoting the ideas of Pestalozzi and Froebel and encouraging new experiments in the care and education of children of pre-school age. Thanks to

the liberal municipal grants which it receives, it is able to maintain, besides the Pestalozzi-Froebel Haus, many smaller kindergartens and day homes for children, one of the most interesting of which is the 'Haus in der Sonne' (the Sunny House) in Lichtenberg, a suburb of Berlin. This institution, which the writer visited in September 1931, is intended for the children of the working people occupying the model workmen's quarters, which have been recently built in Lichtenberg. The school house is as artistically and hygienically designed as the newly constructed blocks of residential buildings for labourers which surround it. It consists of a shelter supported by a steel frame with glass panes which admit plenty of sunlight. Great care has been taken to economise space, the moveable wooden screens, which during the lessons divide the shelter into two or three large rooms, being provided with cupboards in which are kept not only the kindergarten and games material and crockery and cutlery, but even small folding beds which are taken out every afternoon for the children to sleep on. Outside the school building there is enough open space for the children's play as well as for the recreation of their parents during their leisure hours.

The school is divided into two sections—the nursery school or Day Home for children of pre-school age and the Hort for children of elementary schools whose parents go out to work during the day. There are seventy children in the nursery school and twenty in the Hort. The

latter arrive at 2 p.m. after their work in the elementary school is over and stay till 6 p.m. Their time-table consists of rest, play and home-work. The children belonging to the nursery school arrive at 8 a.m. and are engaged in kinder-garten occupations and play till 12-30 p.m. After lunch they sleep till 3-30 p.m. Besides the mid-day meal, they are given coffee and bread and butter in the morning as well as in the afternoon. There are also arrangements for washing. The fees are so low that even the poorest workman does not find it a burden to pay them; the school and boarding fees are 1 mark (1*s*.) a week and 40 pfennig (about 5*d*.) a day respectively. At the time when the school was visited, five children whose parents were unemployed, were receiving not only free education but even free food.

CHAPTER III

ELEMENTARY SCHOOLS

A. The Grundschule or the Foundation School.

As indicated in Chapter I, the *Grundschule* is not a separate type of school, but is the name given to the first four years of the *Volksschule,* which provide a common foundation for all children. As it is upon the *Grundschule* that all further education is built up, its aim is to give such training in fundamentals as will form the basis of the last four years of the elementary school as well as of the initial stages of a middle or secondary school.

The subjects taught during the first four years of school are religion, German, arithmetic, drawing, study of the local environment, singing, physical training, and for girls in the third and fourth school years sewing.

After the passing of the Common School Law in 1920, the Federal Ministry of the Interior issued in 1921, 'Suggestions on the Aim and Organisation of the *Grundschule*' for the general guidance of the States.[1] These 'Suggestions' emphasise three broad principles :—

1. The first principle is that of integrated instruction, which means co-ordinating the various

[1] For a full English translation of these *Suggestions* see *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, pp. 193-202.

subjects of the curriculum and establishing as close a connection between them as possible, instead of treating them separately. Special stress is laid on integration during the first year. There is no time-table for this class, the change from one subject to another being made according to the immediate interests of the children and the situations which arise naturally in the course of instruction. As far as possible, the various subjects—reading, writing, arithmetic, drawing and singing—are taught by the same teacher. In the other classes of the *Grundschule* also, an attempt is made to entrust as many subjects as possible to the same teacher, and where two or more teachers are unavoidable, they are required to work in intimate co-operation, so as to secure the necessary unity of instruction.

2. The second principle is that the knowledge of the home environment (*Heimatkunde*) should form the centre of instruction, so that the closest harmony may be established between school work and the life and experience of the child outside school. The local environment upon which the instruction is based during the first two years is the child's little world of experience—home, school, garden, street, fields, shops, etc. Story telling and dramatisation of fairy tales also form part of this subject. Later on, i.e. in the second, third and fourth years, the study of local environment is correlated with German, with which it is bracketed in the time-table. It is treated as an introduction to geography, nature

study and history and includes observation of the daily and yearly course of the sun and changes of the moon, and local land and water forms ; modelling of earth forms on the sand-table ; and observation of animals and plants. The study of local myths and traditions and the deeds of local heroes prepares the pupils for the study of history.

3. The third principle is the Principle of *Arbeitsschule* or School of Activity. This principle means education through the self-activity of the child. According to it, whatever children are taught must be experienced by them personally and acquired by them independently through observation and creative and manual activities. In the *Grundschule* the self-activity of the children is promoted by means of play, gardening, school excursions and manual work such as plasticine and clay-modelling, drawing and laying of sticks.

In following the principle of self-activity in the lowest class of the *Grundschule,* the teacher pays special regard to the instinct of the child for play. The writer is reminded in this connection of quite an amusing scene which he saw enacted in the first school year class of an elementary school in Berlin. Before teaching the pupils to read and write the word *Schule* (school), the teacher tried to impress on the class the sound of the word by asking two of the children to pretend to be a railway engine, which they did by uttering 'shu', 'shu' as they ran along the open space in the room, moving a stick rhythmically up and down.

In another elementary school the writer had an

experience, which helped him to understand not only how a teacher in the *Grundschule* endeavours to seize every opportunity of putting into practice the principle of self-activity, but also how he seeks to direct the immediate interests of the children into the most fruitful channels. The pupils of the 3rd school year class in this school were engaged in drawing a plan of the class-room. When the writer entered the room, the teacher told them to mark in their respective plans the exact spot where the writer stood, which they did with remarkable accuracy. By thus basing the methods of instruction on the concrete as well as the spontaneous interests of the child, the German teachers in the *Grundschule* not only succeed in avoiding the overburdening of his mind, but in adjusting every subject to his experience.

The total number of hours of work per week in the 1st, 2nd, 3rd and 4th years is 18, 22, 26 and 28 respectively.

B. The Upper Section of the Volksschule.

Boys and girls who do not join a middle or secondary school after completing their four years in the *Grundschule* attend the upper four years of the *Volksschule*. Such children generally enter practical life and receive further education in vocational schools on the completion of their 14th year. Consequently, the courses of study have a much closer relationship to the practical requirements of life than the courses designed either for the *Grundschule*, or the first four years of a

secondary school. At the same time, the standard in German, arithmetic, geometry, history and geography is kept sufficiently high to make the transfer of specially gifted pupils to the *Aufbauschule* possible.

The subjects taught in the upper four years of the *Volksschule* are German, arithmetic and elements of geometry, German history, civics, geography, nature study, drawing, music and physical training. Besides these subjects, boys are taught manual training and girls sewing and, where arrangements can be made, cooking and housekeeping also. A modern foreign language is also sometimes taught as an elective subject. The total number of periods per week varies between thirty and thirty-two. The subject to which the greatest weight is given is, as is to be expected, the German language, for which as many as eight periods are allotted in the 5th class and seven in the other classes. Next in importance are arithmetic and geometry, which are treated together and receive four to five periods in the 5th class and five to six periods in the higher classes. To elementary science, two periods are devoted in the fifth year and three to four periods in the higher classes, while history and civics together get two periods in the 5th and 6th and three periods in the 7th and 8th years. The remaining subjects are taught from two to four periods a week : religion four, physical training three and drawing, singing, geography and manual training (for boys) and sewing (for girls) two

periods each throughout. The average size of a class is forty. Obviously, this is too large for the fulfilment of the principle of self-activity, which, involving as it does, close personal touch between the teacher and individual pupils, demands smaller classes.

Boys and girls are generally taught together in the same school in villages and small towns, but in separate schools in large towns. In village schools, the subjects taught are the same as in town schools, but they are treated differently, the text-books, the examples chosen in arithmetic and other subjects and the methods of teaching being based on rural environments.

The hours of work are 8 a.m. to 1 p.m. in the summer and 8-30 a.m. to 1-30 p.m. in the winter, except in rural areas, where school work begins at 7 a.m. in the summer and 8 a.m. in the winter. The vacations are as follows: Easter: two weeks; Whitsuntide: ten days; summer: five weeks; autumn: two weeks; Christmas: two weeks. In Westphalia and the Rhineland there is no summer vacation, but, instead of it, a long autumn vacation to enable the children to help their parents in harvesting.

Courses of Study in the Upper Section of the Volksschule.[1]

Geography. The course comprises detailed geography of Germany and general acquaintance

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, pp. 212-29.

with foreign countries, especially the German-speaking countries, and an understanding of the place of the earth in the universe. The regional treatment is followed as far as possible. In the treatment of foreign countries, reference is constantly made to local conditions for purposes of comparison. The teacher frequently makes use of pictures and blackboard illustrations and gives the pupils plenty of exercises in map-making, drawing and modelling. Excursions also play an important part in the teaching of geography. In connection with astronomical geography, the pupils are familiarised with the planets and the more important stars and constellations. They are especially encouraged to observe the phenomena visible in their locality. The apparatus used in connection with astronomy is merely intended to explain and illustrate the information obtained by the pupils through observation. Observation of the weather and the study of weather charts are also emphasised and every opportunity is taken of correlating geography with other subjects, especially German, science and civics.

German History. The instruction is limited to the chief facts in the development of the German people and the German State. The attention of the pupils is drawn to the achievements of great men who have shaped German history, especially those belonging to the district in which the pupils reside. The history of other European countries is studied only in so far as it has influenced German history.

Civics. Civics is taught in close connection with history, the aim being to give the children an idea of the present political, social and economic conditions of the country. At the end of the compulsory school period, every pupil receives a copy of the German constitution.

Arithmetic and Geometry. In the *Grundschule* the pupils become acquainted with the four fundamental rules and with the German coins, measures and weights. The work in the upper four years comprises calculation with compound denominate numbers, together with common and decimal fractions. The application of arithmetical rules to the problems of daily life is stressed in all the classes.

The course in geometry includes the understanding and representation of regular areas and solids, the principles of lines, angles and the calculation of solids and areas.

Nature Study. The course consists of materials selected from botany, zoology, physiology, physics and chemistry, according to local conditions and needs. The aim is to teach children to observe and recognise objects, life and processes in nature, so that they may understand and love nature and be able to make use of this information in life. The topics dealt with in connection with physiology include regulations concerning public health (anti-small pox vaccination, prevention of tuberculosis, etc.), and in girls' schools care of the sick and of infants.

Music. The course in music includes, on the

theory side, the theory and history of music and, on the practical side, singing and exercises for training the voice and the ear and developing musical appreciation; for example, exercises in breathing, voice building and in listening.

Drawing. Drawing is taught in close relationship with geometry and manual training. Special stress is laid on the use of geometrical instruments.

Manual training for Boys. This includes instruction in light wood work, cardboard work, bookbinding, metal work and bench work. The aim is not only to train the hand and eye of the pupil, but to cultivate self-help in him. The interest of the pupils is aroused by encouraging them to make simple toys and small articles for their own use from light wood and paper covers for their books. They also make simple articles for school use and take part in repairing the teaching appliances. The instruction in metal work is limited to simple projects in wire and sheet metal.

Domestic Economy for girls. The course includes needlework, cooking, maintaining household accounts and laundry work. The instruction is correlated with other subjects, especially arithmetic and natural science.

Physical Education. Physical training is compulsory for all boys and girls. Exemption for a period not exceeding six months may be given on the production of a medical certificate, and even then it generally means not exemption from physical instruction completely, but only from

those exercises, which, in the opinion of the school doctor, are not suitable for the pupil for the time being. Three hours a week are prescribed for physical training. In addition to this, one afternoon every week is devoted to games.

Methods of Teaching in the Upper Grades of the Volksschule.

The work in the upper grades of the *Volksschule* obviously does not lend itself to integrated instruction to the same extent as in the *Grundschule*. Nevertheless, even in the upper grades, the various subjects of the curriculum do not form water-tight compartments but are closely co-ordinated. For example, drawing and modelling are taught partly with a view to affording the child an opportunity of expression and training his eye and hand, and partly with the object of giving him a concrete idea of spatial relations. The lessons on German are likewise taken advantage of for giving the pupils knowledge of the things around them and for developing their power of observation. Similarly, there is close correlation established between history and geography and between each of these subjects and German.

Heimatkunde, or knowledge of the home environment, is not included in the time-table for the upper grades, but the principle underlying it is followed in connection with nearly all subjects, especially history, geography and nature study.

The importance attached to the activity principle is no less in the upper classes of the *Volksschule* than in the *Grundschule*. But, while in the lower stage the self-activity which is promoted is chiefly physical self-activity based on the play instinct, the upper stage offers opportunities of intellectual as well as physical self-activity. The pupils are required to prepare sketches, drawings, models and, sometimes, apparatus for geometry, geography and nature study. As will be shown in the next chapter, the practical instruction in nature study trains the pupils in observing the growth of plants, experimenting with them and taking care of them and also in looking after animals. Needlework and domestic science give plenty of scope for the manual activity of the girls, and workshops are usually provided for for boys, where they do practical work in light wood, cardboard and sheet metal and wire. In the workshop of a *Volksschule* in Berlin, the writer was much struck by the skill which the boys had acquired in carpentry, smithy, bookbinding and other forms of manual work and by the joy and pleasure with which they were performing their respective tasks. The teacher was a highly educated man and author of a book on manual training.

In order to bring the pupils into actual contact with real life and also to promote their physical well-being, school excursions are organised at least once a month. These excursions give the children new experiences, add to their knowledge

of the environment, develop their power of observation and, above all, help to harmonise school instruction with real life. The essays set in German in the upper classes of the elementary schools are often based on the excursions in which the pupils have taken part. School excursions have also proved a powerful aid in Germany in instruction in geography, German history, arithmetic and geometry. In addition to the monthly excursions, brief visits to shops, factories, gardens, etc. are sometimes arranged by teachers as the need arises in the course of instruction.

Another important form of self-activity is independent reading. Every elementary school has a library well provided with books suitable for young pupils, particularly those with plenty of illustrations and lively detail. The use of the library not only widens the information of the pupils, but trains them in judgment and develops their individual capacities. They are also encouraged to use the dictionary and sometimes to seek for information in books of reference specially prepared for school children.

CHAPTER IV

A GARDEN SCHOOL

In the curriculum of the German elementary schools, next to manual training, the subject which offers the most suitable opportunities for the application of the activity principle is nature study. Owing to the inadequacy of school gardens and class-room instruction for teaching nature study, in some parts of Germany special garden schools, known as *Gartenarbeitsschulen* or garden activity schools, have been established. These schools work in close co-operation with the elementary schools. The following account of a visit paid to the *Gartenarbeitsschule* at Wilmersdorf, Berlin, will be found interesting :—

The Wilmersdorf *Gartenarbeitsschule* was founded in 1920 with the object of creating in boys and girls a love of nature through the principle of *Arbeitschule* or education through self-activity. Nature study is taught here not with the aid of models and pictures, but by giving the pupils an opportunity of regularly observing the growth of plants and animals and actually handling them. Thus practical instruction in the open air takes the place of class-room instruction. Within the school compound, which covers an area of about eight acres, are provided fields for growing vegetables and fruits, a play-ground, sheds for

cattle, a poultry yard, an aquarium, a terrarium, a kitchen for teaching the girls cooking and a workshop where a good deal of the apparatus used in the schools is made by the boys, a science laboratory, classrooms, office room, teachers' room and a store-room.

All the elementary schools in Wilmersdorf are required to send to the *Gartenarbeitsschule* boys and girls studying in the two highest classes, i.e., 7th and 8th school years. These schools are divided into groups, pupils in each group attending in company with the science teachers of their respective schools on the days fixed for them by the Director of the *Gartenarbeitsschule*. In this way over 1,000 pupils from eleven different schools—nine Boys' elementary schools, one Girls' elementary school and one *Hilfsschule* or school for feeble-minded children—take advantage of the facilities for practical instruction and physical education offered by the Wilmersdorf *Gartenarbeitsschule*. Children belonging to schools situated in the immediate neighbourhood of the *Gartenarbeitsschule* come for a whole day twice a week in the summer and three times a month in the winter, while those living at a distance of more than two miles from the school attend only once a week in the summer and twice a month in the winter. The school is not held on wet days.

When the school was founded, the site selected for it consisted of waste land, but it was soon converted into a garden by the pupils. In the beginning, the pupils were allotted individual plots,

each pupil being given ten square yards. This system had two drawbacks : in the first place, it rendered the development of the common life of the school difficult ; and secondly, it was not conducive to scientific manuring. Therefore, in the interests of co-operation and garden economy, it was decided in 1926 to introduce the class system. Each class consists of about thirty pupils and is allotted 300 square yards of land. The product of each plot is shared by the boys and the teacher concerned. There is also a common plot on which the pupils work collectively and the product of which is sold to them. By thus combining the principles of self-interest and co-operation, the Wilmersdorf *Gartenarbeitsschule* has been able to produce excellent results.

Besides gardening and physical education, the subjects of instruction in the Wilmersdorf *Gartenarbeitsschule* are natural history, elementary science, arithmetic and mensuration. The lessons in each subject are given in as practical a manner as possible, and every opportunity is taken to correlate them with the garden work. For example, the questions in mathematics which the pupils do are chiefly problems which have actually arisen out of their own experiences and activities in the garden school.

The teaching staff consists of the Director and the science teachers who come from different schools with their pupils. Every day fifteen minutes before the school work begins, the Director holds a conference of the teachers

present on that day and discusses the following questions with them :—

1. What is to-day's work?
2. How shall we do it?
3. How can it be made useful from the educational point of view?
4. What special opportunities of observation are there for the children to-day?

The aim of the school is not to teach the children technical gardening, but to impress on their minds the value and dignity of manual work. More importance is attached to how the boys work and how they learn than to what they produce, the commercial element being entirely eliminated. Occasionally, each class teacher takes his pupils to the city botanical gardens where they acquire fresh ideas which help them in improving their plot in the school garden. So economically is the school maintained that the total annual expenditure is only about £340.

When the writer visited the school, the majority of the pupils were occupied on their respective plots. They appeared to be very cheerful and to be taking great interest and pleasure in their work. One of the plots was the scene of the distribution of the product. It was very amusing to see the teacher behaving just like one of the members of the class and being treated as such by those pupils who had been elected to give every one his or her share. A group of girls was seen cooking in the school kitchen. The vegetables which had been supplied to them were entirely the product of the

school garden. Cooking is done 3 times a week in the forenoon by 20 girls at a time.

The main building of the school consists of about half-a-dozen old military barracks which have been converted into class-rooms. As all the pupils were engaged in practical work in the open-air, the class-rooms were empty. Nevertheless, there was much to learn even in those empty rooms. In the school museum were to be seen interesting specimens of insects, butterflies, bees, silk-worms and many other things, while the science room was equipped with a thermometer, barometer, hygrometer and a rain gauge. On the black-board in the latter room the diagram drawn by the teacher on the previous day to illustrate the weather in Berlin during the month of August was still present. There were five different curves showing, respectively, the maximum and minimum temperatures, rainfall, direction of the wind, pressure of the wind and humidity.

In the course of a long and interesting conversation, the Director of the school, Herr O. Mehlan, explained in detail the lines on which the *Gartenarbeitsschule* is conducted. The following are some of the advantages which he claimed for his school :—

(1) Contact with nature creates not only a love of nature, but also a love of the home, which is the true foundation of the love of the country. It is only through such contact that the German people can once more attain their former glory.

(2) The *Gartenarbeitsschule* lays great stress on the development of the corporate spirit. Here the teachers work with their pupils as their comrades and get to know them more intimately than is possible for them in the class-room. Through co-operative work children, who in the beginning were narrow egoists, learn to be considerate to others, and through mutual help they are taught the value of social service, without which no family, no institution and no state can thrive. Thus it is in the *Gartenarbeitsschule* that the foundation of true citizenship is laid.

(3) After joining the school the pupils learn to value the work of the peasant. Therefore, even if they do not afterwards take up agriculture as a profession, the training in social equality which they have received is of immense value.

(4) Another problem which the school solves is that of the health of the children—a problem which has assumed special importance in Germany after the War. Work in the open air and the arrangements made for physical education in the school are naturally helping much in building up healthy youths with strong muscles, pure blood and clear brains. The *Gartenarbeitsschule* is thus playing an important part in giving a new life to the nation.

As the writer sat in the Director's room, listening to him and occasionally taking down notes, he could not help feeling that if India had had enough headmasters stirred by the same motive and impelled by the same love for their school and

pupils and equipped with similar knowledge of their vocation, the real and most acute problem of Indian education would have been solved. Herr Mehlan seemed in his unbounded enthusiasm for his *Gartenarbeitsschule* to be almost lost in its cosmic importance. There was an element of pardonable exaggeration in his statements, but still the value of the work which he was doing seemed to be great. A visitor to the school cannot fail to be impressed by the way in which it keeps the children physically fit and mentally alert, teaches them to love nature, develops their creative powers and organising capacity and promotes among them the scientific spirit and the spirit of co-operation. Recognising all these advantages, the Wilmersdorf Municipality has recently decided to extend to the pupils of middle and secondary schools the facilities offered by the Wilmersdorf *Gartenarbeitsschule*.

The Wilmersdorf *Gartenarbeitsschule* has been described in some detail, because, obviously, the principles on which this school is organised have a special significance for India. India needs such institutions even more than Germany, as India is predominantly an agricultural country. The establishment of garden schools adapted to local conditions is especially required in this country to teach the boys the dignity of manual labour and to encourage the educated young men to take to agriculture as a profession and develop this great and profitable industry of the land on sound and scientific lines.

CHAPTER V

MIDDLE SCHOOLS

Before the War, there was little organic unity in the German system of education, which was not so designed as to enable a student to proceed from an elementary to a middle or high school or from a middle to a high school. Though even now pupils wishing to receive high school, and later on, university education generally join a high school after attending the *Grundschule* for four years, facilities have been provided for the transfer of pupils with a literary turn of mind from the upper classes of the elementary schools to the middle and high schools and from the middle to the high schools.

The vast majority of these middle schools are schools with a vocational bias, like the Central schools in England. The *Mittelschulen,* as the middle schools are called in Germany, mainly aim at giving the necessary preliminary training, along with general education, to boys and girls intending to enter commerical, agricultural and technical schools or to secure intermediate positions in the State or local services. The elementary school, being a compulsory school for all children, can provide facilities for this kind of training to a very limited extent. On account of their predominantly literary character, the secondary schools are still less fitted for giving vocational, or even prevocational, education. Hence the need for middle

schools, which, while continuing to give the students the general education which they have already received in the *Grundschule,* or the first four years of the public elementary school, would primarily aim at preparing them for entry into employment at the age of sixteen. It is because the German middle schools do not lead, except in rare cases, to higher academic studies that they are not classed as secondary schools, as the middle schools in India are.

Boys and girls are admitted into middle schools after they have attended the *Grundschule* for four years. A small tuition fee of about five shillings a month per pupil is levied, but reductions according to an approved scale are allowed in the case of children of parents with small incomes. Concessions in fees are also given to the second and third child of the same family. The scale of fees is lower and the number of freeships larger than in the high schools. The course extends over six years. In his first year every student has to take up a modern foreign language. Later on, that is, in his last four years, he may, if he likes, study another modern foreign language. Only selected pupils are, however, allowed to take up a second foreign language. The weekly periods[1] of instruction are 29 to 30 in the first and second years (Classes VI and V), 30 to 32 in the third and fourth years (Classes IV and III) and 32 to 36 in the two highest classes (Classes II and I).

[1] A period is of 45 minutes' duration.

Book-keeping.—As under Plan I, this subject is taught in connection with mathematics.

Shorthand and Typewriting.—1 period a week in Classes III and II and 2 periods a week in Class I.

Greater stress is laid on modern foreign languages than in the other types of middle schools.

INDUSTRY

Gardening.—1 or 2 periods in Classes III, II and I.

Manual Training.—3 periods in Classes III, II and I.

Special emphasis is laid on the natural sciences, drawing and geometry.

Plan III. General Curriculum for Girls.

Gardening.—1 or 2 periods a week in Classes III, II and I.

Shorthand (Optional).—1 period a week in Classes III and II.

Needlework.—2 periods a week in all the classes.

Domestic Economy (Optional).—3 to 4 periods a week in Classes II and I.

Plan IV. Curriculum for Girls with special reference to their Future Vocations.

Domestic Science (Including cooking and the care of the Sick and Infants).—2 to 3 periods a week in all the classes.

Shorthand and Typewriting (Optional).—1 period in Classes III and II and 2 periods in Class I.

More importance is attached to modern foreign languages than under Plan III.

Plan V. Middle Schools which prepare pupils for High Schools.

As already stated, the curriculum for Plan V corresponds to that of the *Realschule*. No vocational subject is taught under this plan. Even manual training is dispensed with, though sewing is retained for girls.

Under all the five plans, physical training is compulsory for boys as well as girls, 3 hours a week being allotted for it in all the classes.

Courses of Study in the Various Subjects[1]

The courses of study in history, geography, mathematics and the natural sciences and the aims of teaching modern foreign languages are briefly as follows :—

History

Stories from local and national mythology, and history taught in Class VI in connection with German, are both designed to prepare the ground for a study of history. In Class V the pupils learn the leading facts of Greek and Roman history, while German history is studied in the

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, pp. 256-77.

remaining four classes. Civics is taught in connection with German history and receives special attention in the highest class.

Geography

Classes VI and V.—Geography of Germany.
Class IV.—Europe outside Germany.
,, *III.*—The World.
,, *II.*—More intensive study of Germany, with special reference to home geography.
,, *I.*—Economic and Commercial Geography of Germany.

Modern Foreign Languages.

English is generally chosen as the first modern foreign language. The aims of teaching a modern foreign language are to impart a knowledge of grammar, to develop the ability of the pupils to understand the spoken language and to read easy books and to give them some degree of practice in oral and written expression and a fair knowledge of the history, geography, social life and culture of the foreign nation concerned.

Mathematics

The main features of the course in mathematics are as follows :—

(1) Algebraic symbols are introduced in Class IV. In this class, as well as in the higher classes, algebra is not taught as a separate subject,

but is closely interwoven with arithmetic. Graphic representation is introduced in Class III and special stress is laid on the solution of equations by means of graphs in Classes II and I.

(2) The greatest possible attention is given to the application of mathematical principles to the conditions and requirements of every-day life. The exercises in percentages, profit and loss, discount and interest as well as the problems on simple equations set in Class III generally have a close bearing on every-day arithmetic. In Class I the pupils are taught insurance tables, logarithms, and, except under Plan V, commercial arithmetic and book-keeping.

(3) In geometry, after studying the main facts of space, perception and the principles of the triangle, quadrangle and circle, and only after receiving thorough practice in the use of geometrical instruments in the earlier classes, are the pupils introduced in Class II to measurement, surveying and calculation of surfaces bounded by irregular lines. They are thus prepared for a study of the main trigonometrical functions and trigonometrical calculations, on which attention is concentrated in Class I.

(4) The course in algebra and geometry is naturally much lighter for girls than for boys. In algebra, the former are taught only as far as the equations of the first degree in one or more unknowns, while in geometry they are not required to do surveying and trigonometrical functions. Arithmetic and algebra are taught with special

reference to their application to household problems. Household book-keeping is introduced in Class II and industrial and commercial book-keeping (under Plans III and IV) in Class I.

The Natural Sciences

The course of study in the natural sciences is framed with the aim of giving the pupils knowledge of the chief groups of the animal and plant kingdoms, as well as of important minerals and such physical and chemical phenomena and laws as have significance for home, industrial and commercial life and such as are helpful in determining climate and weather conditions.

The rudiments of botany, zoology, physiology and hygiene are taught in all the classes, while the study of chemistry and physics is confined to Classes IV, III, II and I.

In biology stress is laid on the observation of the processes of life of plants and animals. Knowledge of gardening, floriculture, agriculture and horticulture is imparted in accordance with the local conditions.

In physiology and hygiene, only those facts are taught which are necessary for an understanding of the functions of the body, the aim being to impress on the pupils the principles of a clean and healthy mode of living.

The course in chemistry and physics is equally practical. In Class IV, instruction in Heat is based on the observations of daily life. In Class II, the principles of Light and Electricity are taught on

similar lines. In Classes III and II, along with the understanding of the fundamental principles and laws of inorganic chemistry, attention is directed to their application to local industries and to local economic life in general. The same principle is followed in regard to the instruction in organic chemistry in Class I. In girls' middle schools, the pupils are taught the physical and chemical processes connected with their work at home, in the garden and the kitchen.

As already indicated, it is in the upper classes of a middle school where special arrangements are made to prepare the pupils for practical careers. In choosing the type of curriculum for any middle school, the needs and economic conditions of the locality in which the school is situated are carefully taken into consideration, and provision is made for industrial, commercial or agricultural training according as the locality is industrial, commercial or agricultural. The training thus given is not training in particular trades or vocations, as in the Trade schools, but it is essentially pre-vocational and preparatory to training in a professional or technical school. After leaving a middle school, a boy may either become an apprentice in a shop or an industrial firm and spend part of his time in a professional or technical school, or he may join a professional or technical school as a whole-time student. At the same time, there is a type of curriculum provided which makes it possible for pupils with a literary, rather than a practical, bent to be transferred after an examination

to the *Oberrealschule* and the *Deutsche Oberschule*, i.e., high schools without Latin, or the completion of the six years' course in a middle school.

One of the best middle schools in Berlin is the one in Schöneberg, which the writer visited in September, 1931. This institution is maintained by the Berlin Municipality and inspected by an Inspector appointed by the State. It is housed in a spacious building, which has a garden and a playground attached to it. The number of pupils on the rolls is 530, 270 boys and 260 girls, the classes for boys and girls being separate. Instruction is provided in all the Plans except Plan V. There are, however, no arrangements for teaching typewriting.

The course in manual training for boys consists mainly of cardboard and wood work. In the case of girls, domestic science receives special attention. The school has an up-to-date kitchen, where the writer watched a very interesting lesson in cooking and had the privilege of sharing with the girls the excellent breakfast which they had prepared. Another interesting lesson was one in music in the lower section of the school. The lesson gave one an idea of the important part played by breathing exercises in music instruction in the German schools. In the teaching of drawing efforts are made to develop the originality of the pupils. The science laboratory is well-equipped with the necessary apparatus and chemicals, and an attempt is made to give a practical turn to the lessons in

physics, chemistry and biology. English is taught for 6 periods a week in Class VI, 5 periods a week in Classes V and IV and 4 periods a week in the three highest classes. The text-books contain mostly such selections from English prose and poetry as are intended to impart a knowledge of English history and geography, and English life and thought. While the Direct method is employed in teaching the meanings and the subject-matter, the lessons in grammar are given chiefly through the medium of German. A glance at the English essays written by the pupils of Class I, (the highest class, age 16) revealed a richness of imagination and a wealth of ideas rarely to be found among Indian students of corresponding age. From the point of view of language, however, the average standard seemed to be no higher than that of students of Form VI in India. The themes of the essays written in German by the pupils of the higher classes had been selected with a view to giving the pupils an opportunity of displaying their knowledge of every-day science and their powers of imagination and observation. An interesting feature of the essays written by the pupils of some of the classes was that they were illustrated either by pictures cut out from newspapers or by actual drawings especially prepared by the students. Similarly, the home-work books in civics contained pictures of the Reichstag building, Von Hindenburg, President of the Republic, Dr. Bruning, the Chancellor, and other leading ministers and statesmen.

The school attaches great importance to physical education. It has a large gymnasium and an instructor for boys and an instructress for girls. The instructor as well as the instructress had received training in physical education for two years at the School of Physical Education in Spandau after completing their elementary school course. The writer watched a class of girls engaged in physical exercises. All the girls were in bathing costumes, and while some of them wore rubber-sole shoes, others were barefooted. The teacher was using a drum in connection with the rhythmic exercises, which formed part of the programme for the day. The girls seemed to take much delight in doing these exercises.

The school has an additional class in Domestic Science and Household Management for girls who have completed the middle school course. It also has an Old Students' Association, for which one of the rooms in the school building is set apart.

Before the Revolution of 1918, there were only two kinds of middle schools in Germany—middle schools for boys and middle schools for girls. The reform by which five different types of middle schools were brought into existence was opposed, for different reasons, as well by the advocates of the elementary schools as by those of the secondary schools.[1] The former objected to it on the ground of the withdrawal of the better pupils from the elementary schools, while the latter were afraid

[1] Vide *Educational Yearbooks of the International Institute of Teachers' College*, Columbia University, 1925 and 1926.

of a complete identification of the middle schools with the lower middle and upper middle sections of the secondary schools. But the *Mittelschulen* found a strong supporter in Dr. Boelitz (formerly Minister of Education in Prussia) who declared that a more practical course than that provided by the secondary schools was necessary in the interests of trade and industry and of the officials in subordinate service. The popularity of the middle schools has increased after the War, because, owing to the abolition of conscription, there is no longer any inducement for the pupils to join a six-year secondary school for the sake of winning the social distinction of one year's exemption from the two years' compulsory military service. Nevertheless, there are still some German States where the *Mittelschulen* are unknown and where the preparation for professional training is left entirely to continuation or vocational schools.

CHAPTER VI

VOCATIONAL SCHOOLS

There are three main types of vocational schools in Germany—Continuation Schools, Trade Schools and Commercial Schools.

Continuation Schools.

Before the war, there was an imperial law by which industrial employers could be compelled to allow their employees under 18 years of age the necessary time to attend continuation or vocational schools in places where such institutions had been established by the local authorities. The local bodies were also authorised to compel the employers to contribute towards the maintenance of the continuation and vocational schools. But the number of local bodies which enforced these provisions was small.

After the Revolution, the Federal Constitution laid it down definitely that full-time education up to 14 years of age should be followed by part-time school attendance till the completion of the 18th year. By imposing compulsory attendance on all young persons, and not merely on young persons

actually in employment, the framers of the Constitution of the German Republic aimed at virtually raising the school-age all over Germany by 4 years. But the Federal Government has not provided any effective machinery of its own for enforcing this law, and though all the States have passed legislation for its fulfilment, they have, with a few exceptions, left the initiative for the establishment of continuation schools to the local authorities. The result is that of the young persons coming within the ambit of the law, only about 35 per cent, the vast majority of whom are boys, are actually under instruction. Continuation schools exist in all important towns, but the number of such schools in the rural areas is inadequate. Owing to the financial crisis with which the country has been faced for some time past, not only is an extension of continuation education out of the question at present, but there is a fear of even the existing facilities for such education being curtailed. Nevertheless, the importance of continuation schools is recognised by all the States, and there is no doubt that when the economic and monetary condition of the country improves, they will make efforts to give full effect to the Federal law mentioned above.

There are four kinds of continuation schools—industrial, commercial and domestic continuation schools (under the control of the Ministry of Trade and Industry) and rural continuation schools (under the control of the Ministry of Agriculture). The curricula and syllabuses have been prepared

with due regard to the demands of the different vocations; for example, nature study is given a prominent place in the curriculum of the rural schools, book-keeping and shorthand are taught in the commercial schools and domestic economy and hygiene in the domestic schools for girls. The course in arithmetic in each type of school is correlated with the vocation of the pupils concerned. Besides physical education, civics is also a compulsory subject in all types of continuation schools, for the aim of these schools is not only to give the pupils vocational training, but to prepare them for citizenship. As a rule, separate sections are organised for pupils engaged in the different occupations, but in large industrial towns there are separate schools for particular trades or occupations. The larger schools have their own buildings; others use the premises of schools of other types.

The continuation schools are held either in the morning or in the afternoon, but more often in the afternoon. The industrial and commercial schools generally have a three years' course and provide instruction for 8 hours a week for 40 weeks a year.[1] In some cases, the pupils take all the 8 hours' instruction on one day each week; in others, they attend for 4 hours a day twice a week,

[1] When the writer was in Germany in September 1931, it was reported that one of the measures which the Government had decided to take for economising the expenditure on education was that the weekly hours of instruction in the continuation schools be reduced to 6, so as to make it possible for these schools to work with a smaller teaching staff.

the former practice being more common. The rural schools work mainly in the slack season. They too have a three years' course. Except in rural areas, where practically all the teaching work is done by teachers of the elementary schools, the continuation schools are staffed by teachers who have undergone a special course of training for work in such schools. No fees are levied. The Federal Constitution even provides that instructional material shall be supplied free to the pupils, but owing to the lack of funds, no attempt has yet been made to enforce this.

The cost of maintaining the continuation schools is shared by the State, the local bodies and the employers. The continuation schools owe much to Trade Unions, Chambers of Trades and Chambers of Commerce. So great is the faith of these bodies in the continuation schools that they very often take the initiative in establishing such schools. In Thuringia the cost of the salaries of the teachers in all kinds of vocational schools is borne by the State, while the local bodies supply the necessary equipment.

In big towns the size of a continuation school is sometimes enormous. For example, in Cologne, which has a population of about 800,000, there is a continuation commercial school with a strength of 6,800, 2,500 of whom are boys and 4,300 girls. Separate sections are organised for the two sexes with separate courses in each section for pupils who are engaged as shop attendants and shop clerks. Part-time attendance makes it possible

for the school to carry on its work with only 75 teachers, 27 of whom work in the Boys' Section and 48 in the Girls' Section. Each pupil attends, along with the other pupils in his or her group, for 4 hours a day twice a week.

The school is maintained by the municipality and housed in a large building, which was used as barracks, originally, by German troops, and during the occupation, by British troops. The premises have been recently remodelled to meet the requirements of the school.

Instruction in domestic economy is given to all the girls for two hours a week. The room where typewriting is taught is equipped with 30 desks, each fitted with a mechanical device by means of which the typewriter can be pushed down and a wooden board for writing raised simultaneously to take its place.

In the same building is housed a Domestic Economy Continuation School for girls employed in factories. There are 3,000 girls in this institution, who are taught by 24 teachers. The curriculum comprises domestic economy and hygiene, German, civics and household arithmetic. The course in domestic economy includes practical training in needlework, laundry work, cooking, nursing and the care of infants. The kitchen is fitted with electric cookers. One could not help admiring the cleanliness of the kitchen, the laundry room and the room for storing provisions, attached to the kitchen. An interesting feature of the instruction in needlework is

that magic lantern slides are used for illustrating the details of intricate designs. The school also has a fine reading room.

Trade Schools.

Above the continuation schools are the *Fachschulen* or Trade Schools. These latter are full-time day schools, which give specialised training to young persons desiring to enter into employment in one of the trades and industries of the country. The cost of the trade schools is shared between the State and the Local Authority, but administration is under the Ministry of Trade and Industry. Tuition fees are charged, and the attendance is optional.

The most important trade schools are building trade schools, textile schools and schools for the metal industries. Each of these types has a lower and a higher school. Admission to the former is open to pupils who have completed their elementary school course, while to the latter only those pupils are admitted who have attended a middle or secondary school for six years. In many cases, the requirements for admission also include practical experience in the trade concerned for one or two years. Trade schools are generally provided with well equipped workshops and laboratories, and the wireless, the cinema and lantern slides are sometimes used in connection with the instruction given in these schools. The course extends from two to four

years and includes, besides technical subjects, which involve a good deal of practical work, German, hygiene, civics, and with special reference to the industry or trade concerned, mathematics and the natural sciences. As in the trade schools of England, the apportionment of time between theoretical and cultural education and practical training for a three years' course is two-thirds to one-third in the first year, half and half in the second year and one-third to two-thirds in the third year. Special trade schools for women, known as the *Frauenfachschulen,* have been recently established in some parts of Germany. They have a two or three years' course with provision for training in technical drawing, photography, millinery and other professions which are generally taken up by women.

Commercial Schools.

Apart from the commercial continuation schools, there are full-time commercial schools, known as the junior commercial schools and the senior commercial schools. The course in each of these types of schools extends over a period of two years; but whereas a student may join a junior commercial school after finishing the eight-year course in an elementary school, the senior commercial schools admit only those boys and girls who have successfully completed the full course in a middle school or the first six years' course in a secondary school. These institutions are under the administration of the Ministry of

Trade and Industry and are supported partly by tuition fees, partly by the Chambers of Commerce and partly by the State and municipalities. The curriculum comprises German, civics, arithmetic, economics, book-keeping, shorthand, typewriting, commercial knowledge and at least two foreign languages in the senior and one foreign language in the junior commercial school. Physical education is compulsory. The total number of hours of instruction per week is usually 32.

Technical and Commercial Colleges.

The Technical Colleges (*Technische Hochschulen*) and Commercial Colleges (*Handelschochschulen*) in Germany rank as universities and award diplomas and degrees. The qualifications required for admission into these higher technical and commercial institutions are the same as those for entrance into other universities, that is, a candidate must have passed the Leaving Examination of a nine-year Secondary School.

Of the institutions which the writer visited in Germany, there were few which he found more instructive than the *Technische Hochschule,* Berlin. A description of this Technical College is, however, outside the province of the present work.

Vocational Guidance.

According to the Juvenile Welfare Law of 1927, the country has been divided into large districts

each with an Employment Bureau. Each of these Bureaus controls a number of Local Employment Bureaus, whose duties include, *inter alia,* the giving of vocational guidance to school boys and girls who are undecided about their occupations or who aim at entering occupations which are already overcrowded. The Employment Bureaus also deal with pathological cases. The psychological tests used by them are intended to supplement, and not to substitute, the information obtained about individual pupils from the headmaster of the school, the school doctor and the parents.

Causes of the Success of German Vocational Schools.

English and American writers have spoken of the organization of vocational and technical education in Germany in terms of almost unqualified praise and admiration. The continuation, trade and commercial schools have made a valuable contribution to the commercial and industrial development of the country during the last fifty years. The causes of the success of these schools are as follows :—

(1) The co-operation of the State, the local authorities and especially the employers.

(2) Great care has been taken to organize the vocational schools on the basis of the actual social and economic needs of the country.

(3) With their knowledge of the economic conditions of the country and with the aid of

psychological tests, the Employment Bureaus give useful guidance to young persons as to the vocation that they should prepare for.

(4) The closest contact is maintained between the vocational schools and the industries and the business firms concerned.

(5) The curricula of all types of vocational schools include some element of general education.

CHAPTER VII

SECONDARY SCHOOLS

Aim of Secondary Schools.

German secondary schools aim at preparing their pupils for entrance into a university or a higher technical institution of university rank, and at the same time, at giving them such a liberal education as will be helpful to them in any career that they may decide to enter upon after leaving school.

How admission into Secondary schools is regulated.

As stated in Chapter I, boys and girls are received in the secondary schools after four years' attendance, or if they are found to be specially gifted, three years' atttendance, in the *Grundschule*. Before the War, the admission of a pupil into a secondary school depended chiefly upon the ability of his parents to pay the school fees, but now care is taken to ensure that boys and girls desiring to receive secondary education are really fit for it. Except in Prussia, there is an oral test before admission. Even in Prussia, where the test was abolished as recently as in 1931, the recommendation of the headmaster of the elementary school, which regulates admission to a secondary school, is based on a thorough

examination of the child's ability, and after admission the latter is considered to be on probation during his first year in the secondary school. Thus, the secondary schools in Germany are no longer schools for the children of the privileged classes, but they are intended rather for intelligent and promising children, irrespective of the social status of their parents. There is no 'Free Place Examination', as in England. If the parents of a child who possesses the intelligence and aptitude necessary for higher education are poor, a scholarship or a freeship is given to him to enable him to study in a secondary school, for the Federal Constitution has emphasised the principle that poverty should be no bar to a student receiving the kind of education for which he is best fitted.

Types of Secondary Schools.

The most striking feature of German secondary schools, which is at first almost bewildering to a visitor from India, is their variety. There are nine-year secondary schools as well as six-year secondary schools. Of the former, there are six types, viz., the *Gymnasium, Reformgymnasium, Realgymnasium, Reformrealgymnasium, Oberrealschule* and *Deutsche Oberschule.* The six-year types are the *Progymnasium, Realprogymnasium* and *Realschule,* with courses similar to those of the first six years of the *Gymnasium, Realgymnasium* and the *Oberrealschule,* respectively. These schools do not lead up to the

university, but to the three highest classes of the type of the nine-year school upon the first six years of which each of them is based. Their importance has somewhat diminished since the Revolution for reasons stated in Chapter V.

Classes in the Secondary Schools.

The class organisation in the secondary schools is as follows :—

Age	Nine-year Schools	Six-year Schools
10 +	*Sexta* (VI)	*Sexta* (VI)
11 +	*Quinta* (V)	*Quinta* (V)
12 +	*Quarta* (IV)	*Quarta* (IV)
13 +	*Unter-Tertia* (Lower Third : U III)	*Tertia* (III)
14 +	*Ober-Tertia* (Upper Third : O III)	*Sekunda* (II)
15 +	*Unter-Sekunda* (Lower Second : U II)	*Prima* (I)
16 +	*Ober-Sekunda* (Upper Second : O II)	...
17 +	*Unter-Prima* (Lower First : U I) ...	...
18 +	*Ober-Prima* (Upper First : O I) ...	...

While *Sexta* is the lowest class both in the nine-year and six-year secondary schools, *Ober-Prima* is the highest class in the former and *Prima* the highest class in the latter. In the nine-year schools, Classes VI, V and IV represent the lower section, U III to U II the middle section, and O II to O I the upper or the high section. In the *Suggestions for the Courses of Study of the Prussian Secondary Schools*, the Prussian Ministry of Education gives an interesting classification based on the psychological characteristics of the different stages of development in the life of a student.[1] According to it,

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 316.

Classes VI and V comprise the period of childhood, i.e., the period of primary experience; Classes IV to U II the period of boyhood and girlhood, i.e., the period of intuitive knowledge; and Classes O II to O I the age of maturity or the period of reflective thinking.

Characteristics of the different types of High Schools.

The characteristics of the different types of the nine-year secondary schools are as follows :—

1. *The Gymnasium.*[1] This is the earliest type, dating from the 16th century. It corresponds to the English Grammar School. The *Gymnasien* were originally established to give professional training to the clergy and consequently emphasised Latin, Greek and Hebrew, especially Latin. After the Renaissance and the Reformation, they provided a more liberal training, though the emphasis on the ancient languages remained. Under the influence of the great educational reformer Humboldt, the *Gymnasium* grew up in the 19th century to be a centre of the humanistic sentiment and intellectual discipline. He was a great admirer of the Greek ideals of life and he wanted the students of each *Gymnasium* to be imbued with these ideals. For a long time the *Gymnasien* enjoyed a privileged position. All those who wished to become clergymen, jurists, doctors or high officials of the State were required to pass through these schools. But in

[1] *Gymnasium* is a Greek word meaning a training ground.

the last quarter of the 19th century, when Germany was becoming rapidly industrialized, many people, including the Emperor, felt that the *Gymnasien,* with their stress on the study of dead languages, were divorced from every-day life and that they lacked a national basis. 'It is our duty to educate young men to become young Germans and not young Greeks and Romans', declared the Emperor in a speech in 1890. Nevertheless, it was not till 1901 that the newer types of high schools, which the growing material needs of the middle and commercial classes had brought into existence, were recognized as giving an education of equal value and were allowed to send their pupils direct to the university. Since then the importance of the *Gymnasium* has steadily declined, though there are still many Germans who look upon it as the most elegant type of high school. In recent years a number of the *Gymnasien* have been converted into *Real* or *Reform* schools, while others have added parallel *Real* sections.

Religion, German, Latin, geography, mathematics, natural sciences and drawing are taught in all the classes. Greek is begun in U III, a modern foreign language in IV and history in V. Formerly, students of the upper classes were required to translate from German into Latin and to write essays in Latin, but this is no longer necessary. Hebrew and English are optional.

2. *The Reformgymnasium.* The *Reformgymnasium* is a modification of the *Gymnasium.*

It offers courses both in Latin and Greek, but a modern foreign language is begun in *Sexta*, and the study of Latin is postponed till *Untertertia* and that of Greek till *Untersekunda*.

3. *The Realgymnasium.* This type is a compromise between two different tendencies in education, the classical and the utilitarian. It aims at acquainting its pupils with European thought since the Renaissance and its influence on German culture. The curriculum emphasises two modern foreign languages—English and French—and includes Latin, which is taught from the lowest class right up to the highest class. There are two reasons why Latin is made a compulsory subject in this comparatively modern type of secondary school. In the first place, Latin is considered to be the foundation of language study; and secondly, the study of this classical language is regarded as essential for understanding the historic development of the culture of the three leading Western European countries, viz., England, France and Germany.

4. *The Reformrealgymnasium.* Though organised with practically the same objective as the *Realgymnasium*, the *Reformrealgymnasium* pays greater attention to French and English than to Latin. It begins with a modern foreign language and teaches Latin only for four years (U II to O I).[1]

[1] The older *Reformrealgymnasien* begin Latin in U III and teach it for six years.

5. *The Oberrealschule.* Like the *Realgymnasium* and *Reformrealgymnasium*, the *Oberrealschule* teaches two modern foreign languages, but it lays special stress on mathematics and science. Its curriculum does not include any classical language, though Latin may be studied as an extra subject in the same way in which English may be taken as an additional subject in the *Gymnasium*.

6. *The Deutsche Oberschule.* The *Deutsche Oberschule,* or the German Upper school, is a post-war institution which arose out of the strong desire which the German felt in the hour of defeat to preserve their national literature, philosophy and art, of which they had always been proud. The *Deutsche Oberschule* aims at the thorough study of national culture and therefore special attention is paid to the language, literature, art and history of Germany. In view of the cultural relations with England and France, either English or French may be chosen as the first foreign language, which is taught from the lowest class onwards. Later on, a second foreign language (English if the first foreign language is French and *vice-versa*) may also be studied. The number of *Deutsche Oberschulen* is at present very small. The insistence of the universities on the inclusion of two foreign languages is making it difficult for the *Deutsche Oberschule* to carry out its original object of emphasising national culture.

The number of weekly hours to be devoted to

each subject in the different types of secondary schools is prescribed by the Ministry of Education in each State. The subjects common to all types of high schools are religion, German history, geography, science, mathematics, foreign languages and drawing. The only subjects which are taught in some schools but not in others are Greek and Latin. What distinguishes one type of high school from another is the emphasis on certain lines of study; classical languages in the *Gymnasium,* modern foreign languages in the *Realgymnasium,* mathematics and science in the *Oberrealschule,* and German literature, art and history in the *Deutsche Oberschule.* This fact will be made clear from the following table, which shows the variations in the total number of weekly hours (i.e., periods of 45 minutes) devoted in all the classes to the different subjects in the different types of high schools :—[1]

Subjects	Gymnasium	Reform-gymnasium	Real-gymnasium	Reformreal-gymnasium	Ober-realschule	Deutsche Oberschule
Religion	18	18	18	18	18	18
German	31	37	31	35	37	44
Latin	53	40	41	16	...	...
Greek	36	32	...	...	...	...
Modern Foreign Language	15	32	...	...	...	...

[1] Detailed tables are given in Appendix A.

Subjects	Gymnasium	Reform-gymnasium	Real-gymnasium	Reformreal-gymnasium	Ober-realschule	Deutsche Oberschule
First Modern Foreign language	...	...	27 (24)	44 (41)	40	46 (43)
Second Modern Foreign language	...	...	20 (23)	23 (26)	22	13 (16)
History and Civics ...	19	17	20	22	22	25
Geography	12	12	13	13	14	18
Mathematics ...	33	33	36	37	43	37
Natural Science ...	18	18	25	23	35	30
Drawing	14	14	18	18	18	18
Music	4	4	4	4	4	4

N.B.—The figures in brackets apply when English is the first modern language.

Physical education is compulsory in all the classes. In each class two periods a week are devoted to gymnastics and drill during school time and two periods to outdoor games on afternoons when there is no school.

As a consequence of the cuts in educational expenditure introduced in 1931, the total periods of instruction per week, even in the upper section, have been reduced, and for the time being, the weekly periods devoted to some of the subjects, notably German, music and physical education are less than those indicated above.

The provision of a common course with Latin in the lower middle stage, i.e., from *Sexta* to *Quarta*, in the *Realgymnasium* and the *Gymnasium* enables a student to move from one of these types of schools to the other during the first three

years of his secondary school career. The common foundation of the lower sections of the *Reformrealgymnasium, Oberrealschule* and *Deutsche Oberschule,* all of which begin with a modern foreign language, is extended to five years in the case of the *Reformrealgymnasium* and the *Oberrealschule.* There are not many towns which can afford to maintain more than one high school. Consequently, two or three types are not infrequently combined into a single institution under one Director. For example, at Weimar the same high school provides instruction for pupils taking up the *Realgymnasium, Reformrealgymnasium* and *Oberrealschule* courses, respectively. In such cases, a student is able to change his course without having to leave one school to join another.

Admission into Universities.

After completing the nine years' secondary course, a student appears in the *Reifeprüfung* or 'Maturity' examination, success in which entitles him to enter a university or a higher technical, commercial or agricultural institution of university rank. As will be shown in a subsequent chapter, each high school holds its own 'Maturity' examination. Though the admission of a student to a particular course of study in a university does not depend upon the type of high school which he has attended, pupils who have not studied Latin at school have to pass an examination in this language if they intend to study theology, law, medicine, philosophy or philology.

The Aufbauschule.

It has been mentioned in Chapter I that since the Revolution a new kind of high school, known as the *Aufbauschule,* or Superstructure school, has been created in Germany out of the normal schools for elementary teachers which have been closed down. The *Aufbauschule* admits specially gifted children who have studied in an elementary school for seven years and gives them secondary education for six years, at the end of which period they are allowed to take the 'Maturity' examination. Thus the lowest class is *Untertertia,* instead of *Sexta,* and the age of pupils who enter it is thirteen.

The *Aufbauschulen* may be organized either with the objective of the *Oberrealschule* or of the *Deutsche Oberschule.* They do not therefore constitute a new type of high school, but represent a new form of organization.

The *Aufbauschulen* are very popular and their number is steadily increasing. Prussia alone has eighty-five *Aufbauschulen,* seventy-four for boys and eleven for girls. There are two reasons for the growing popularity of this kind of school. In the first place, as it links up the upper classes of the elementary schools with the secondary school, pupils whose intellectual capacity develops late are given an opportunity of receiving secondary education; and secondly, in rural areas where there is no secondary school in the neighbourhood, the parents are enabled to keep their child-

ren at home for three years longer, i.e., up to the age of 13, which, apart from other advantages, means a considerable reduction in the expenses of education. In some cases the *Aufbauschule* has a boarding house attached to it.

The *Aufbauschule* was originally intended to be the high school of small towns, but in recent years it has been established in large towns also, and the advocates of the nine-year secondary schools are afraid that it may, in course of time, become the normal type of high school. In view of the fact that the period for preparation for the 'Maturity' examination is only 6 years in the *Aufbauschule*, as compared with 9 years in the other kinds of high schools, it was expected that care would be taken to admit into the former only talented children from the rural areas and small towns; but in the beginning, owing to their anxiety to secure adequate strength, the Directors of these schools were not overstrict in admitting pupils. During his visit to a *Reformrealgymnasium* which had opened *Aufbau* classes, the writer learned that, of the pupils who had been enrolled in *Untertertia*, only 17 per cent. passed the 'Maturity' examination after 6 years of regular study.

Girls' Secondary Schools.

The claims of girls for higher education were not fully recognised in Germany until quite recently. In 1908 a thorough reform of the girls' secondary schools was carried out, providing better facilities for the higher education of girls

and giving them freer access to the universities. Since then, the universities have been thrown open to women on the same conditions as to men. The grant of franchise to women in 1919 has given a further impetus to the movement for placing within their reach equal educational opportunities, and there has been a considerable increase in the number of girls receiving high and university education.

The conditions for the admission of girls into secondary schools are the same as in the case of boys. The secondary schools for girls are as follows :—

(1) *The Lyzeum.* This type has a six years' course corresponding to the *Realschule* and the first six years' syllabus of the *Oberrealschule.*

(2) *The Oberlyzeum.* The *Oberlyzeum* is a three-year extension of the *Lyzeum,* corresponding to the three highest classes of the *Oberrealschule.*

(3) *The Studienanstalt.* This is parallel to the *Oberlyzeum* and is intended for girls who, after completing the first three years' course in the *Lyzeum,* wish to study the classical languages. The last six years may be organised on the basis of the middle and high sections of the *Gymnasium, Realgymnasium, Reformgymnasium* or *Reformrealgymnasium.*

(4) *The Deutsche Oberschulen.* This is a nine-year school like the *Deutsche Oberschule* for boys, and it teaches the same subjects during the

first three years as in the corresponding classes of the *Lyzeum* and *Oberlyzeum*.

(5) *The Aufbauschule.* The *Aufbauschule* for girls is organised on the same principles as the school of the same name for boys.

The admission of girls to boys' secondary schools is allowed in places where the number of girls is not sufficient to justify the opening of a separate high school for them. All the courses devised for girls begin with a modern foreign language, the most popular being those of the *Reformrealgymnasium* and *Oberrealschule*. Where Latin is taught, it is begun in *Untertertia*. The secondary schools for girls have gradually given up all other special characteristics except needlework. It is maintained that the girls need the same kind of liberal and scientific education as boys. But though girls and boys study common subjects, the detailed syllabuses for girls in the different subjects take into account their special needs and interests, and more attention is paid to art, religion, music and languages and less to mathematics and science.

The Frauenschule.

For girls who are not aiming at university studies and who wish to receive training for practical careers after attending a *Lyzeum* or a middle school for 6 years, there is a special type of institution known as the *Frauenschule*. This school offers theoretical instruction as well as practical

training for two or three years in domestic work, hygiene, care of infants, social work and kindergarten work, its aim being to educate future wives, mothers, kindergarteners and welfare workers. With a view to economising the expenses, the *Frauenschule* is always attached to a *Lyzeum* or an *Oberlyzeum*. The writer had occasion to visit the *Frauenschule* attached to the *Staatl. Elizabeth Schule* in Berlin. There are two classes in this *Frauenschule*. The girls in the first year class study German, domestic science, hygiene, religion, history, civics and elementary economics. The optional subjects are history of art, French, English, music, drawing and shorthand. In the same building, a kindergarten is maintained where the girls are taught the care of infants and, later on, kindergarten methods in a practical way. The course of practical training also includes cookery, gardening and needle-work. The weekly hours devoted to theoretical and practical work are about half and half. The second year class is a class for future child-welfare workers and kindergarteners, and among the subjects taught are psychology, pedagogics, religion, drawing, hand-work, needle-work and music. Nine hours a week are allotted for practice in the kindergarten attached to the school and two hours for garden work. Opportunity is also given to the pupils to visit *Grundschulen* (Foundation schools), *Hilfschulen* (schools for feeble-minded children), hospitals and factories. Physical education is compulsory. At the end of the second year there is an examination,

after passing which girls aiming at employment in a child-welfare bureau have to undergo further practical training in that special branch for one more year.

The Study of Modern Foreign Languages in German Secondary Schools.

The modern foreign languages taught in German secondary schools are generally English and French. The first modern foreign language, that is, the modern language which is begun first, varies in different parts of Germany. As a rule, in Bavaria, it is English; in North and East Prussia English; in the Rhine Province French; in the other provinces, it is English in some schools and French in others. In the eastern parts of Germany provision is made for teaching Polish and Russian as optional subjects. Spanish is also included under optional subjects, and in recent years there has been some tendency in Prussia, Hamburg and Bremen to encourage the study of this language. This is done on utilitarian, rather than cultural, grounds, for a knowledge of Spanish is of immense value in business firms which have commercial dealings with South America.

The study of English is becoming increasingly popular and French is losing some of the importance which used to be given to it formerly. This is mainly due to the fact that the English-American culture is now recognised to be as important as the French culture. Nevertheless, there are still

many Germans who are in favour of French being taught as the first modern language in all secondary schools, not only because they consider that being derived from Anglo-Saxon and French, English is learned more easily as a second modern foreign language, but because they regard a knowledge of French as much more useful than that of English. An able German school-master, whom the writer met, gave the following explanation for his preference for French: 'French gives better grammatical training and helps us more in understanding our own language and culture than English. Moreover, the French will always be our neighbours, to whom we are bound, whether by sympathy or otherwise. So we ought to know them best'.

There is actually a high school in Berlin with French as the medium of instruction. On the recommendation of the Prussian Ministry of Education, the writer visited this school during his stay in Berlin in 1927. It is known as the *Fransosisches Reformgymnasium,* and is situated close to Unter den Linden, which is one of the most aristocratic quarters of Berlin. It was founded originally for the education of the Hugenots. It was here that the Ex-Crown Prince of Germany was educated, and in the Director's room visitors are shown the chair which the prince used to occupy. The school is now attended chiefly by pupils who wish to join the diplomatic service, for which a high standard of French is required.

Size of Classes.

The high schools of Berlin are big institutions with 500 to 750 pupils on the rolls. According to the official regulations which were in force until quite recently, the size of a class in the lower, middle and upper sections should not exceed 55, 44 and 33 respectively. Now, as a result of the reduction of the teaching staffs, the size of the classes has been slightly increased. But even before the economy measures were introduced, owing to the insufficiency of the teaching staffs, in many schools the number of pupils attending a class was in excess of the prescribed limit. In the *Oberrealschule,* Schiller Strasse, Charlottenburg, which is one of the leading high schools in Berlin with over 600 pupils on the rolls, there were in 1927 only 31 teachers for 24 classes. The Director, who had studied at Cambridge before the war and spoke English fluently, informed the writer that the educational authorities fully recognised the disadvantages attached to large classes, but that owing to the financial stringency, they were unable at present to increase the number of teachers.

Expenditure.

The expenditure on a German high school naturally depends on the number of pupils and classes. The annual expenditure of the school mentioned above for the year 1926-27 was about 330,000 Marks (£16,500), out of which 290,000

Marks (£14,500) were spent on the salaries of the teaching staff.

Fees.

Fees are levied in all secondary schools in Germany. Nearly 30 per cent. of the cost of a secondary school is met from this source. Different States, and sometimes different schools in the same State, have different scales of fees. But, in general, the rate is much lower than in the secondary schools of England. Before the recent cuts in educational expenditure were made, the rate varied between 100 Marks (£5) and 200 Marks (£10) a year. The income of the parents was taken into consideration in the award of freeships and half-freeships. Fees were also reduced for several children of the same family, being 200 Marks for the first child, 150 Marks for the second child and 100 Marks for the third, while the remaining children, if any, were exempted entirely from fees. With effect from 1st October, 1931, the annual school fee has been raised to 240 Marks with corresponding concessions. Fifteen per cent. of the fee income of a school is set aside for the provision of free places (exemption of total, half or quarter fees according to the pecuniary circumstances of the parents).

Scholarships.

Scholarships are granted to poor children of proved merit. Owing to financial difficulties,

however, the States and the municipalities upon which the maintenance of the secondary schools devolves, have not yet found themselves in a position to offer an adequate number of scholarships, with the result that only a small proportion of the intellectually gifted children belonging to the working classes are, at present, able to take advantage of the secondary schools. The middle schools are more easily accessible to them as well as to the children of the poorer middle classes owing to the lower scale of fees charged in those institutions.

Daily Time-table, School Year and Vacations.

Excluding the time spent on physical exercises, games, excursions and elective subjects (for example, English in the *Gymnasium*), the total number of hours of instruction in the secondary schools till 1st October last was 26 to 27 in the lower section and 28 to 30 in the middle and upper sections. There were 6 periods of 45 minutes each with two intervals of 15 minutes, one at the end of the second and the other at the end of the fourth period. As a result of the new regulations introduced on the above-mentioned date, the total number of periods has been reduced, the length of each period has been increased to 50 minutes and the intervals have been shortened. The total number of working days in a year amount to 240. The school hours and the vacations are the same as those observed in the elementary schools.

General Character of Secondary Schools.

Secondary education in Germany is organised on lines which have no parallel either in India or in England. In the first place, the secondary course in Germany is much longer than in most other European countries and India. Secondly, while in India and England arrangements are made in the same type of secondary school for meeting the varying demands of the pupils, Germany has different types of schools for boys and girls desiring to specialise in different subjects. It is true that there is a growing tendency in Germany to organise two, and sometimes three, types of syllabuses in the same institution, but this means establishing parallel classes in most subjects, at any rate, in the middle and upper sections, for as it will be shown in a subsequent chapter, even in common subjects like history and geography, different courses of study are prescribed for different types of schools so as to bring these subjects into the closest possible relation with the central subjects of the individual type of schools. Another feature of the secondary schools in Germany which distinguishes them from the English, though not from the Indian secondary schools, is that, with very few exceptions, German secondary schools are day schools.

Many students leave the secondary schools before completing the nine years' course, and even of those who take the 'Maturity' Examination, only about 50 per cent. can afford to receive

university education. Nevertheless, in 1931, nearly 15,000 students joined the various universities, where the total strength is 150 per cent. higher now than it was before the War.

Students who do not go to the university usually take up business careers which require higher educational qualifications than those associated with the elementary and middle schools. The needs of such pupils do not receive any special consideration in German secondary schools. The courses of study in all types of schools are designed on a humanistic and linguistic basis and are intended to give a kind of general and liberal education, for the Germans believe that even for future vocational work a sound foundation of general education and culture is necessary. The writer was informed by the Directors of several secondary schools that such of their old pupils as had taken up employment in business and industrial firms, had proved very successful in their respective professions. One of these Headmasters expressed the opinion that the German chemical industry owed its world-wide reputation, in no small measure, to the integrity and efficiency of the large number of young men with the 'Maturity' certificate who were employed in that industry. The education authorities are generally satisfied with the results of the present system, though with the gradual increase in the number of children of the lower middle and working class families enrolled in the secondary schools, there is a demand being made now in certain quarters for making

the curriculum of the upper classes more elastic with different courses of study for students who are aiming at entrance into a university and those who wish to enter on a practical career after the completion of the secondary school course. However, the vital problem before Germany is how to absorb in the none too prosperous industries and business firms of the country the growing number of students who are turned out by the high schools and the universities every year. This problem has become the more acute now owing to the existing economic and financial distress.

General Principles of Instruction.

'The Suggestions for the Courses of Study in the Prussian Secondary Schools' (*Richtlinien für die Lehrpläne der höheren Schulen Preussens*) issued by the Prussian Ministry of Education in 1925 give detailed information regarding the scope of the different subjects and the principles to be followed in teaching them. Similar *Suggestions* have been issued by the Educational Ministries of other States. In preparing the syllabus in each subject, the authorities have paid due regard to the educational objective of the different types of schools; for example, ancient history and geography of Greece and Italy receive special attention in the *Gymnasium*. The teachers are required to keep the *Suggestions* in view in teaching each subject, though within the outline thus prescribed, they have liberty as to method, books etc., subject to the approval of the Inspector.

The following is a brief summary of the general principles of instruction which apply to the curriculum as a whole :—

(1) *Principle of Concentration.* All the subjects should be so co-ordinated as to preserve German cultural unity in the diversity of the secondary school system. The subjects which impart this unity are those common to all types of schools, especially German, geography, history and religion, which is mainly treated historically.

(2) *Principle of Correlation.* In teaching one subject, every possible assistance should be obtained from the other subjects of instruction. Staff conferences are one of the means employed for securing correlation and dovetailing of the instruction in the different subjects.

(3) *Principle of Activity Instruction* ('Arbeitsunterricht'). This principle is defined in the Prussian *Richtlinien* as follows : 'All instruction is fundamentally activity instruction. The teacher must consider not merely the learning, but what powers in the pupil can be developed. Class-work should consist in co-operative give-and-take under the leadership of the teacher.' In other words, the teacher is not to aim merely at transmitting knowledge to the pupils, but he is to take every opportunity of securing their co-operation in class work and of encouraging self-activity on their part, so that they may acquire new knowledge by their own exertions and efforts. It is pointed out that only in this way can the pupils' intellectual powers, especially their imagination, judgment

and initiative, be developed. The *Suggestions* issued by the Prussian Ministry of Education also draw attention to the fact that the great purpose of activity instruction is 'to bridge the natural gap between the acquisition of definite knowledge, without which higher intellectual activity is not possible, and the acquisition of the ability to do independent work, without which knowledge remains unproductive'.[1] In accordance with the principle of self-activity, great stress is laid in German secondary schools on home work, independent reading, free discussions among the pupils in the class, drawing, practical work in science, manual activities of the pupils in connection with geography and, above all educational excursions.

(4) *The Free Activity Group* ('Arbeitsgemeinschaft'). The Free Activity Group is an adjunct to regular school work, its aim being to give the pupils of the upper section extended opportunities of doing independent work in subjects which appeal to them most. A group of twelve to fifteen pupils is formed for the study of a subject in which they are especially interested. A project is chalked out beforehand, on which the students work together on their own initiative once a fortnight outside the usual school hours. The teacher acts as helper and critic, suggesting new lines of thought, books of reference, etc.

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 319.

The method is similar to the Dalton Plan, but it must be remembered that participation in the free activity group work is purely voluntary. Among the subjects on which the free activity groups work may be mentioned biology and *Deutschkunde* or German culture and civilization.

Students' Self-Government.

As has been mentioned on page 9, students' self-government has been organised in all the secondary schools. In accordance with the official regulations, at the beginning of the school year a school committee is elected, composed of two representatives of each of the four highest classes. This committee is a kind of link between the head-master and the general body of students. Whenever there is an important matter about which the head-master considers it desirable to consult the wishes of the pupils, he calls a meeting of the school committee. The committee has, moreover, certain definite duties such as preparing the programme for the school festivals and supervising the children of the lower section on the playground.

The chapters that follow give an account of the syllabuses and the methods of instruction followed in some of the subjects taught in the German secondary schools. It would be instructive for those connected with the high schools in India to know what standard is aimed at in Germany in subjects which are common to German secondary schools and Indian high schools and how the

teaching is conducted in the former. Owing to the important place which English occupies in the curriculum of the high schools in India, the writer was especially interested in the teaching of this language and attended English lessons in all the secondary schools which he visited in Germany. He also watched lessons in history, geography, mathematics, science, drawing and music, and with the help and courtesy of the head-masters and teachers concerned, he was able to form some idea of the lines followed in teaching these subjects.

It is not easy to compare the syllabuses in German high schools with those pursued in the Indian high schools. From the point of view of the standard aimed at in common subjects, the two highest classes of the German secondary school really correspond to the Junior and Senior Intermediate classes in India rather than to Forms V and VI or the Pre-Matric and Matric classes. But even in *Obersekunda,* which is the 11th year class, if the four years spent in the elementary school are taken into consideration, the standard in mathematics, history and geography is higher than the standard required for either the School Leaving Certificate or the Matriculation Examination in India.

CHAPTER VIII

THE TEACHING OF ENGLISH

The Lower Section.

The teacher introduces the children in the lower section to the study of the English language by giving them in German an idea of the country inhabited by the English people. For this purpose he presses into his service such knowledge of England and her people as the pupils have previously acquired in connection with the study of other subjects, especially geography.

In the initial stages, the teaching of English is based on two great principles: viz., practice in using English sounds, especially those which are not found in German, and practice in conversation.[1] After the sounds have been practised with the aid of a phonetic chart, the children are taught to count in English. As they are already familiar with the symbols, their attention is not diverted from the sounds. Thus, the lesson on the numerals gives the teacher a good opportunity of speaking to the boys in English. He begins with such sentences as 'Can you count

[1] Vide *German Higher Schools* by James Russell and Bureau of Education, India, *Occasional Reports* No. 4, 'Furlough Studies'.

up to fifty in English'? 'Read the numbers on the board'; 'Is that right'? Then easy sums are written on the board and questions are put at each step and rapidly answered by the boys. Other sentences follow corresponding to certain specific actions on the part of the teacher, for example, 'I open the book'; 'I write'. The pupils watch his actions and repeat the words after him. Thus knowledge of the word and its meaning go hand in hand. The teacher then proceeds to give them commands, taking care to use only those words with which the boys have become acquainted. Explanations in German are given only where they are absolutely necessary for making the meaning clear. After having thus acquired practice in listening, the pupils soon learn to express in English simple facts relating to their immediate environment and daily life as well as the subject-matter of such lessons in their books as they have read in the class. The sentences learnt by them are written on the board in ordinary characters and not in phonetic characters, though the use of the phonetic chart is sometimes continued for reference. In every conversational lesson special attention is paid to pronunciation and correct English idiom.

The English Readers used in the lower classes of the secondary schools in Germany are based on two important principles. In the first place, the various lessons deal with the surroundings and daily life of the pupils at home and in school.

Secondly, new words are introduced only after the boys have had thorough practice in the use of words already learnt by them. Accordingly, words studied by them in prose are repeated in the poems following the prose lessons. The pupils are made to memorise from prose and poetry and are also given practice in singing. Sometimes Rapid Readers also form part of the reading material.

Each lesson in the Reader prescribed for detailed study is read only after the pupils have become familiar with its language and subject-matter by means of oral exercises. Isolated words are never used. New words are written on the blackboard as they occur in the text-book, but the pupils are taught the meanings of these words only as they stand in sentences. The lessons in translation are closely correlated with the text-book. In grammar, too, the pupils are taught the different parts of speech as they occur in their Reader. In the lessons on conversation they get plenty of practice in conjugating the verbs with which they have become acquainted.

Written work in the lower classes consists of dictation, using in sentences words learnt in the text-books, supplying suitable words in sentences with blank spaces, translation into English of simple German sentences bearing on the vocabulary and grammar which the boys have already learnt and writing short stories told by the teacher in the class.

An account of the actual lessons attended by the writer in a girls' high school in Berlin will give a more concrete idea of how English is taught in the two lowest classes in German secondary schools. This institution was the Staatl. Elizabeth Schule, where the pupils take up English as the first modern foreign language and consequently commence it in *Sexta*. The girls in this class had been studying the language only for 3 months when the writer visited the school in August 1927. Within this short period, they had learnt by the Direct method to converse on the objects in the class-room and had already been introduced to the First Reader containing, among others, the following lessons[1] :—

1. Numbers. 2. Easy sums. 3. Objects in the Class-room. 4. Commands and answers. 5. Rhymes. 6. (*a*) School Room ; (*b*) What the Teacher does. 7. At School : Work and Play. 8. School Excursions. 9. Washing and Dressing. 10. On the Way to School. 11. Our Home. 12. Proverbs.

The first four or five lessons are taught in *Sexta* and the remaining ones in *Quinta*. The lesson for the day in the former class was 'The

[1] During the writer's second visit to Germany in 1931, he learned that a new series of English Readers had been introduced. Miss Schmidt kindly presented him with a copy of the First Reader of the new series, containing, among others, the following lessons :

'On the Way to School', 'Work while you Work' (a poem), 'A Drawing Lesson', 'My Room' (a poem), 'Anne's Home', 'Do your best' (a poem), 'In Father's Garden', 'Helping Mother', 'Keeping Shop', 'Playing at Shop' (a poem), 'The Doll Wash', 'A Doll's Song'.

Class-room'. The teacher at first questioned the class in English on the objects in the class-room and wrote down on the black-board the answers thus elicited. 'This is a desk'; 'That is the wall'; 'There are six pictures in the class-room'; and so on. She then read out the lesson in the Reader in a loud and distinct voice. The pupils followed her, one after another, and each mistake made by them was corrected by her. They were then made in concert to repeat words which presented any difficulty to them. The meanings were carefully explained, and subsequently in order to make sure that the pupils had understood the explanations given in English, the teacher made them translate difficult words and sentences into German. After this, the black-board was rubbed out and the pupils were asked to write down in their exercise books the words and sentences which they had learnt. A few minutes were then spent in giving the pupils practice in conjugating such new verbs as they had come across in the lesson. Finally, the class sang in chorus a previously learned song, which contained words with which the pupils had already become familiar.

In *Quinta* the lesson began with conversation about the weather. After this subject had been exhausted, the teacher engaged the class in conversation on the last school excursion. Errors of grammar and idiom committed by the pupils in their answers were carefully corrected. It was evident that the girls loved taking part in

excursions, for, when the teacher informed them that an excursion had been planned for that week, their faces beamed with joy. The class was then introduced to the lesson on 'School Excursions' in the Reader. Particular attention was paid to reading and pronunciation. Words with which the girls were not quite familiar were written on the board and the pupils were made to use them in sentences of their own. The teacher explained to them the words 'thirty feet high' by telling them that the walls of the building mentioned in the book were twice as high as the walls of the class-room. She, subsequently, made them convert thirty feet into metres. To ascertain that the girls had really understood the meanings of the difficult parts of the lesson, she got them to translate them orally into German. She followed this up by giving them in German, sentences bearing on the lesson for translation into English. Finally, she called a pupil to the platform who put questions to the rest of the class on the subject-matter of the lesson. The power of expression which the pupils displayed was remarkably good, considering that they had been studying English only for a year and three months. At the end of the period, the teacher showed the writer their written work, which was extremely neat. It was all in ink and had been done entirely in the class.

Both the lessons mentioned above were taught with remarkable thoroughness. The teacher, Miss Schmidt, had a surprisingly good command

of English. In the course of a conversation during the recess, she talked about Tagore, with whose works she seemed to be well acquainted. When asked how she had managed to acquire the native English pronunciation and accent, she said that it was due to the fact that she had spent many years in England. But it was not her knowledge of English alone which made her lessons so effective; she knew how to teach a foreign language.

Aim of Teaching English in the Middle and High Sections.

The aim of teaching English in the middle and upper stages of German high schools is not merely instruction in English language and literature, but the study of English life and culture through language and literature. Students of English are expected to know something about the industrial and social history of England as well as the development and present organisation of the British Empire. For this purpose, the teaching of English is correlated with the courses of study in history and geography. The English text-books, especially the selections, also give them a knowledge of the customs and culture of the English people. The study of English national life thus helps the students to understand English literature, while the study of English literature gives them a knowledge of English national life.

Text-books and Methods of Instruction in the Middle Section.

The text-books used in the middle classes generally contain selections from Marryat, Hughes, Wilde, Jerome, Stevenson, Kipling, Washington Irving, Mark Twain and Hawthorne. Poems, short biographies, easy dramas, Dickens' *The Child's History of England* and portions of Collar's *Industrial and Social History of England* also form part of the reading material recommended for these classes.

Practice in conversation is continued in the middle classes. In addition to conversation arising out of the prescribed books, dialogues and speeches by the pupils are occasionally organised. In some schools gramophone records are used for training the pupils' ear. The written work in the middle classes consists of dictation, translation, reproduction of the stories read by the boys and description of daily happenings.

Grammar is generally taught inductively and incidentally, the text-book being largely employed for the purpose. This does not, however, mean that the study of formal grammar is dispensed with ; occasionally one even comes across teachers who follow the deductive method. But grammar is never considered to be an end in itself ; it is treated only as a means for strengthening the pupil's command over the accurate use of the language. The whole ground of grammar is covered before the pupils reach *Untersekunda*. Special

attention is paid to the correct use of the article and the prepositions and to the recasting and combining of sentences.

Two lessons watched by the writer in the middle section of two different schools may here be described.

The prose text-book of *Obertertia* in a *Realgymnasium* in Berlin was 'The Bottle Imp', a short story in Stevenson's *Island Nights' Entertainment*. As the lesson for the day involved the elucidation of geographical features, a map of North and South America had been hung on the wall. The teacher began by questioning the boys in English on the idiom, grammar, meanings and subject-matter of the previous lesson. He then wrote on the black-board the heads under which the story should be told and asked those boys who could narrate it to raise their hands. One of the many students who had put up their hands was called to the platform. Whenever he forgot any point while telling the story, the other boys were asked to help him. Similarly, they corrected the errors of grammar and idiom committed by him. The new lesson in the Reader was then taken up, each boy reading in turn; any mistake that was made by the boys was corrected by the teacher after he had given the rest of the class a chance to correct it. The meanings of words were explained with the aid of the black-board and explanation of the subject-matter was given with the aid of the map. Towards the end of the period, the teacher wrote on the black-board the new

verbs which the boys had learnt, and drilled them in the use of the tenses.

In another school, which was an *Oberrealschule,* the prose text-book prescribed for *Untersekunda* was *The Growth of the British Empire,* edited by A. C. Kerr (printed in Leipzig in 1931). The work of the class began, as usual, with questions and answers on the meaning and subject-matter of the previous lesson, of which the boys appeared to have a good grasp. One noticed that the teacher was anxious to get the boys to use the new words and expressions which he had taught them on the previous day. The boys expressed themselves in fairly correct, but by no means, fluent or idiomatic English. The lesson for the day was the 'Formation of the East India Company'. The teacher first of all explained to the boys what they were going to read about. The lesson was then read by them paragraph by paragraph and the meaning and subject-matter were explained by the teacher by means of questions and answers. The teacher used the black-board frequently in connection with grammar and the meanings of words, while in explaining the subject-matter he correlated the lesson with history and geography. A map was, however, lacking in the class-room.

Two excellent features common to both the lessons mentioned above were : (1) that hardly any German was spoken either by the teachers or by the boys, though the German equivalents of certain words, phrases and idioms were mentioned ;

and (2) that the teachers took care not to correct any error so long as there was any boy in the class who could do so.

Text-books and Methods of Instruction in the Upper Section.

The reading material suggested by the Prussian Ministry of Education for the higher classes—O II, U I and O I—is as follows:—

Poetry. At least one play of Shakespeare; in the *Gymnasium*, one of the historical Roman dramas.

Selections from Milton (in the *Gymnasium*, poems relating to Greece and Rome), Moore, Wordsworth, Coleridge, Shelley and Keats.

English ballads and lyrics: Scott, Byron and Burns.

The critical study in connection with poetry includes Shakespeare's art in relation to the Renaissance; comparison of Shakespeare with old French and German dramatists; with reference to Milton, development of religious life in England up to Newman and the Oxford Movement; Victorian poetry and its relation to American literature.

Prose. Stories in which the Germanic element is well depicted and which approximate to German feelings.

Works of modern writers, such as Chesterton, Shaw, Galsworthy, Wilde and Wells.

History and Politics: Lecky's *The American War of Independence*; Spark's *Life of George Washington*; Seeley's *Expansion of*

England; parliamentary speeches of famous English orators.

Works of philosophers and thinkers of the 18th and 19th centuries: Shaftesbury, Locke, Hume, Adam Smith, John Stuart Mill, Herbert Spencer, Carlyle, Ruskin and William James.

The reading of English newspapers and magazines is also recommended.

The tendency generally is to prefer modern authors to classic writers.

Below are given the names of the books which were in actual use in 1927 in the three highest classes of a high school in Berlin:—

O II. *Tales and Stories from Modern Writers.*

U I. Doyle: *The Memoirs of Sherlock Holmes I.*
Dickens: *A Christmas Carol.*
Jerome: *Three Men in a Boat.*

O I. Shakespeare: *Hamlet.*
Galsworthy: *Strife.*
Aronstein: *Selections from English Poetry.*

In the *Reformrealgymnasium* Section of the High School at Weimar, the students of the upper section were studying the following books in 1927:—

O II. Wells: *The Invisible Man.*
Irving: *Tales of the Alhambra.*

U I. Shakespeare: *The Merchant of Venice.*
Dickens: *Oliver Twist.*

O I. Shakespeare : *Hamlet.*
Bernard Shaw : *St. Joan.*
Seeley : *Expansion of England.*

The text-books followed in the *Oberrealschule*, Köln-Mulheim in 1931 were :—

O I. Shakespeare : *The Merchant of Venice.*
Dickens : *A Christmas Carol.*

O II. Shakespeare : *The Merchant of Venice.*
Scott : *Ivanhoe* (abridged edition).

In all the three institutions mentioned above, English is taught as the second modern foreign language.

It is interesting to observe that among the supplementary books which the pupils of *Oberprima* in many high schools in Prussia were reading in 1931 was a small book printed in Germany entitled, 'Mahatma Gandhi : A Selection from his Writings'.

It is evident that the aim of giving the pupils a sound knowledge of English culture through the English language cannot be attained by an extensive, still less an exclusive, use of the Direct method. One finds the teachers of the upper classes resorting frequently to explanations in German. They are compelled to do so because, in spite of the heavy course, only three to four periods a week are allotted for English in these classes, as against four to five periods in the middle section and six periods in the lower section. As it is not possible to do justice in the

class to such reading material as is recommended chiefly for imparting a knowledge of English history, organisation of the British Empire, English political theories and English philosophy, only portions of the original texts are read in the class, while the rest is studied by the pupils at home in German translations.

The main features of actual class instruction in English in the upper section are practice in reading, linguistic exercises connected with the reading material, discussion of the contents of each lesson, written composition and translation. It may interest teachers of English in India to know that in connection with translation, teachers of English in German secondary schools sometimes translate into German a suitable passage from an English book and set it in the class for re-translation into English. After the boys have rendered the passage into English, they are made to compare their translation with the original. The Germans find English spelling very difficult, because unlike English, German is written as it is spoken. Consequently, not only in the lower and middle sections, but even in the upper section, the written work done by the students has to include dictation.

Special care is taken to train the boys to appreciate good literature. One is struck by the efforts which the teachers of English make to bring the critical faculties of their pupils into play by asking them such questions as 'What do you think of this story?' 'Why is this passage beautiful?'

There can be no doubt about the soundness of the methods employed in Germany for teaching English. But, in order that they may be successful, it is necessary that the teacher should be thoroughly acquainted with the language, literature and culture of the English people. The writer's impression is that teachers of the type of Miss Schmidt, who has been mentioned above, are exceptions rather than the rule in Germany at the present day. Though the importance of the study of English in German secondary schools has increased in recent years, comparatively few teachers of English have had the opportunity of training their ear by a visit to England. For a long time after the war the Germans could not think of entering the Allied countries, and even much later, when mutual good-will was restored between the English and the Germans, financial difficulties prevented German teachers from visiting England. Recently, however, the system of exchange of students and teachers, which has been established with England and America, is making it possible for teachers and intending teachers to gain a better command of the English language by residing in England and the United States.[1]

Another factor which affects the efficiency of teachers of English in Germany and prevents

[1] In 1931 there was an exchange of twenty-eight teachers between England and Germany. Of these, ten were full-time teachers and eighteen half-time teachers giving only conversational lessons.

them from acquiring that mastery over the language which is necessary for the fulfilment of the aims set out in the official regulations is that they are required to teach two other subjects.

The Aim of Teaching English in Germany and India.

In the secondary schools of Germany a modern foreign language is taught partly for its value for commercial purposes, but chiefly for giving the pupils increased knowledge of the life, thought, customs and institutions of the people who speak that language. It is recognised that a true insight into the culture of a foreign nation cannot be obtained except through a study of its language and literature, and an understanding of foreign culture is considered to be valuable not merely for its own sake, but for the sake of the help which it gives in interpreting German culture and appreciating it in the light of foreign culture. "The introduction to the foreign intellectual world', declares the Prussian Ministry of Education in its *Suggestions for Courses of Study of the Secondary Schools of Prussia,* 'should seek no mere acquaintance with isolated cultural facts and situations; it is rather a question of teaching how to understand life as it affects the whole of a foreign civilisation, especially in its language and literature, and of making it useful for the pupil's spiritual training. Especially should the pupil be led to a thorough knowledge of the genius of his

own race through a comparison of the foreign character with the German'[1]

The aim of teaching English in Indian high schools is greatly influenced by the demands of the High School Leaving Certificate and Matriculation examinations, which mainly test the ability of the pupils to write English correctly and their knowledge of grammar and meanings of difficult words and passages occurring in the prescribed text-books. In other words, to borrow the phraseology used by Dr. Michael West of Dacca University, English is taught as a language of Expression rather than as a language of Impression. The result is that even when the students go up to the university stage, their minds are filled with words, and the study of the English language adds little to their ideas of English life and culture.

Dr. West has rightly emphasised the need for developing the reading ability of the pupils, but one cannot agree with him when he says that if the student does not possess this ability, 'he has no chance of access to the world's literature of information' and 'is cut off from all intellectual progress'.[2] It is a truism that information is better assimilated by the pupils if it is imparted to them in their mother-tongue than in a foreign language. Therefore, as far as information and

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and T. Alexander, pp. 389-390.

[2] Vide *Report of the Third Imperial Education Conference* prepared by the writer in collaboration with Mr. Syed Mohamad Husain Jaferi (Government Press, Hyderabad, Deccan) and *Bilingualism* by Dr. Michael West.

intellectual progress are concerned, what is necessary in India is that the vernaculars should be enriched.[1] The development of the reading ability of the pupils in English is important for a different reason, and that is that it is only by this means that they can fully appreciate the genius of the English nation and gain that insight into its life and culture which will help to make the Indian characteristics clearer to them in the light of a foreign culture.

No doubt, circumstances in India compel us to devote special attention to the expressional aspect of the teaching of English, but this is no reason why the cultural aspect should be thrown entirely into the background, as is often done in Indian schools at present. The fact that the development of the reading ability of the pupils is not only useful from the cultural point of view, but even from the point of view of their vocabulary and power of expression gives additional weight to the argument in favour of attaching greater importance to English as a language of Impression.

One of the conditions necessary for the attainment of the cultural aim mentioned above is that the lessons in English should be closely correlated with the other subjects of instruction, particularly history and geography. It has already been shown how the principle of correlation is carried out by the teachers of English in German schools. Although in India the value of

[1] Vide *Report of the Third Imperial Education Conference* (Government Press, Hyderabad, Deccan), pp. 77-87.

such correlation is recognised, the insufficient knowledge of the history and geography of England possessed by the teachers of English makes the application of the principle difficult. It is therefore suggested that a short course in English History should be introduced in the training colleges for those intending teachers of English who have not studied English History in the university.

The Direct method of teaching English has become quite popular in Indian schools in recent years. It is very useful in the initial stages for developing the power of speech of the pupils, but it is necessary that its limitations as well as its advantages should be clearly understood by the teacher.[1] There are three other important features of the teaching of English in German schools, which are worthy of special notice. One is that the entire subject of English is treated as an organic whole, and in order to establish a close correlation between the various branches of the study of English—prose, poetry, composition, grammar and translation—they are entrusted, as far as possible, to the same teacher. Secondly, emphasis is laid on an intelligent reading of the text, and to secure this, reading is preceded by conversation on the subject-matter. Thirdly, in the higher classes, efforts are made to cultivate among the pupils an appreciation of good literature.

[1] Vide *The Teaching of English in India* by H. Wyatt, chap. iv.

It will have been observed that in Germany no foreign language is taught during the first four years of a child's education. Happily, there is at present a tendency in India also to postpone the teaching of English until a child has received some grounding in his mother-tongue. But, unlike the Germans, we do not fully appreciate the importance of a sound foundation in English ; for, while we endeavour to secure M.A.'s and trained graduates to give instruction in English in the high stage, in the initial stage we often entrust the subject to men who are thoroughly incompetent and ill-fitted to handle it.

CHAPTER IX

THE TEACHING OF HISTORY AND GEOGRAPHY

A. History

Summary of the Syllabus.

In *Sexta* there is no historic instruction, properly speaking. The teacher of German, however, gives, in the course of the lessons on German, biographical sketches of eminent men and women who lived at the boys' native place, and tells, in the form of stories, interesting events which have taken place in the immediate or surrounding neighbourhood. In *Quinta,* regular lessons in German history are begun, and the chronological order is followed up to the present times, the teacher confining himself to eminent figures. In *Quarta* the chief events of Ancient Greek and Roman History are taught up to the decline of the Roman Empire. Correlation between history and German is secured by the teacher of German being required to have recourse to ancient history to explain the myths and legends occurring in the text-books on German used in the class. In *Untertertia* the chronological order is followed to the end of the 30 Years' War (1648). The course for *Obertertia* is from the Treaty of Westphalia

to the Congress of Vienna (1815), from which point the work is continued in *Untersekunda* to modern times. In the three highest classes is carried out an intensive study of the different periods—of Greek and Roman History and the Middle Ages up to the 13th century in *Obersecunda,* then from the 13th century to the Congress of Vienna in *Unterprima* and then from this point to the present times in *Oberprima.*

In the upper classes the attention of the pupils is directed to great lines of historical development and to the ideas which have influenced the course of history, not only German History but World History. The functions of Government, the idea of nationality, the rights and duties of a citizen, the different forms of suffrage and the relations between the individual and the State or Society, as well as between authority and liberty, are carefully explained to the students. They also study the history of the various social and economic movements. Great importance is attached to the history of the 19th and 20th centuries, for the Germans believe that without a thorough study of modern times, it is not possible to understand fully the political, economic, social and other problems of the present day. The course for the 'Maturity' Examination includes political and economic theories, comparison of important foreign constitutions with the German constitution, rights of nationality, International Law and the League of Nations.

Aim of Teaching History.

The general aims of teaching history, as set forth in the *Suggestions for the Courses of Study of the Secondary Schools of Prussia,* may be briefly summarised as follows[1] :—

(1) To acquaint the pupil thoroughly with the society or community in which he lives, and German nationality and the State.

(2) To train his historical sense, so that, by being led to understand the present in the light of the past, and past events in the light of present conditions, he may be able later on to judge independently the political problems which will confront him in life.

(3) To create in him a feeling of political responsibility.

As in pre-war days, the chief aim of history teaching in German secondary schools is still to foster a national spirit in the pupils and to create in them a love of their country. Special stress is laid on the characteristics and achievements of the German people. In the *Suggestions,* referred to above, the history teacher is advised to impress on the minds of his pupils the composite richness of German culture, so that they may realise the importance of its preservation and development. He is also asked to set before them great personalities, such as spiritual leaders, statesmen, inventors, discoverers and leaders in

[1] Vide *Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 357.

social movements, as examples of sacrifice and devotion.

At the same time, the 'spirit of international reconciliation', the cultivation of which is enjoined by the Weimar Constitution, is not to be neglected. In connection with the history of other nations, the pupils are taught to acknowledge and appreciate the great deeds of other peoples and to understand the inter-dependence of great nations in the matter of culture and civilisation. It is pointed out in the *Suggestions* that the study of the history of art brings out clearly the cultural relationships existing among great nations.

Treatment of Material.

As has already been indicated, German History is emphasised in all the stages of instruction. Even when a teacher is dealing with the history of a foreign country, he takes every opportunity of explaining the relation of that history to German History.

No importance is attached to the mere learning of historical details for the sake of knowledge. Special emphasis is laid on the cultural side of historical events and on the social and economic conditions of each period. The history of dynasties, diplomatic quarrels and succession disputes are treated as briefly as possible, and as for the history of wars, attention is paid only to their general character, political causes and results.

Special attention is paid to correlation between history and other subjects, particularly geography,

German and foreign languages. Intimate connection between German and German History is maintained from the lowest to the highest class in every secondary school. With regard to the connection between history and foreign languages, it is stated in the *Suggestions* that 'instruction in every foreign language will furnish valuable assistance in training in history, because we can understand a foreign national spirit only if we delve deep into the mother-tongue of that country'.[1] How the study of English is made to help the students in understanding English History has already been shown in the chapter on the 'Teaching of English'. The same principle is followed with reference to French. In view of the intimate relationship existing between history and geography, these two subjects are often taught by the same teacher, especially in the lower classes. The influence of physical features on the course of events is always carefully explained by the history teacher.

Method of Teaching History.

Abundant use is made of pictures in the lower classes. Summaries and surveys are avoided lest they should diminish the interest of the children in the stories from German History which are related to them in the early stage of historical instruction. In the middle section, the personality

[1] Vide *Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 364.

and achievements of great men still form the centre of instruction, and political and social events are treated, as far as possible, according as they have been influenced by such men. The treatment of the subject is realistic. The pupils are encouraged to make observations in their own vicinity and elsewhere when they go on school excursions. Visits to museums, monuments, old forts and old buildings all help to give a vivid form to the events of the past.

The method of teaching history in the upper classes has undergone a great change in recent years. Formerly, the method followed was very similar to that which is still pursued in many Indian high schools today, i.e., the pupils depended for their knowledge of history on their text-books and on the lectures and explanations given by their teacher. But now the boys are required to do most of the work by their own efforts. In progressive schools, for each lesson the pupils have to read beforehand a certain chapter in the book recommended by the teacher and are even asked occasionally, when the need arises, to consult original sources suitable to their intellectual development. They are also encouraged to read biographies, books on travel and historical novels and dramas. At school they spend the greater part of the history hour in giving summaries and explanations of what they have prepared beforehand and in putting questions to one another thereon. This method is based on the principle of *Arbeitsunterricht* (activity instruction) and is

employed the more intensively the more advanced the pupils are in their work.

The *Suggestions* issued by the Prussian Ministry of Education are extraordinarily informative, but they avoid giving strict regulations. Within the course prescribed, the teacher exercises a wide choice. He is even free to offer his own political views, but he is not to treat the opinions of others with contempt, as this, it is felt, would be an attempt to influence the boys politically, which must be avoided in the interests of freedom and toleration. In the *Suggestions* the attention of history teachers is particularly drawn to the importance of training the youth to tolerate and esteem the views of others.

Here and there may be found teachers who are regular party men and who try to teach the pupils their own point of view ; but, on the whole, the boys in the higher classes are much too independent to accept biased views. There is no lack of the right kind of history teachers who treat the subject from a scientific point of view and who lead the boys to form their own judgments by encouraging them to read the works of the great historians and historical documents. There is a society called the 'Radical School Reformers', which has been exercising an ever-increasing influence on school methods, especially those connected with historical instruction. Lessons in history given by teachers belonging to this society are characterised by free and lively discussions in the class.

Civics. Civics is taught side by side with political history. The aim is to cultivate in the pupils public-mindedness and law-abidingness and to prepare them to take their part in public affairs confidently on their own initiative. It is pointed out in the *Suggestions* that this object can be attained only if the whole life of the school is filled with public spirit and if the pupils are trained in responsibility and leadership in connection with the various school activities. Teachers are advised to make use of the experiences of the pupils in class as well as in student organisations in laying the foundation of civic training. Apart from games, school journeys, Boy Scouting and other students' organisations, the system of self-government, described in Chapter VII, gives the pupils excellent training in citizenship. Special attention is to be paid to Kultur history, with reference to which the State is to be depicted as the most powerful of all Kultur institutions, being more important than the family or the vocation.

B. Geography

A summary of the syllabus followed in geography in German secondary schools is given in Appendix B. What strikes one about this syllabus is its scientific and comprehensive character. Every aspect of the subject receives due attention, physical, political, astronomical, geological, economic and human geography being all put in their proper places and so treated as to form one organic whole.

Aims of Teaching Geography.

The aims of teaching geography in German secondary schools are : (1) to cultivate among the pupils love of the native soil ; (2) to enable them to understand the relation between the physical features of the earth (climate, soil, water forms, plant life) and human life and to show them how the development of the different countries has been influenced by their geographical position and natural resources ; and (3) to guide them gradually to form independent judgments on geographical questions. While in the lower section appeal is made to the emotions and imagination of the pupils, in the middle and upper sections every effort is made to develop their judgment.

Methods of Teaching.

Geography lends itself admirably to the principle of self-activity instruction. Accordingly, the Prussian *Suggestions* lay special stress on the drawing of maps, diagrams and graphs, the making of card-board, wood and sand models, and, above all, on excursions to industrial centres, big workshops, factories, museums, railway stations, and wherever possible, to harbours and big towns. Great weight is attached to the observation of the weather and the study of weather charts. In connection with astronomical geography, the pupils are trained to observe the phenomena visible in their locality. Every school possesses a relief map of the home district. The pupils are trained in the use of the map and the atlas from the very

beginning. To learn to use a map in the open, they sometimes undertake a journey on foot through unknown parts with a map as their only guide.

Pictures are employed for developing the emotions and imagination of the children in the lower section and making the lessons vivid and interesting. Encouragement is given to the pupils to collect pictures and stamps of foreign countries. Many schools use the magic lantern in teaching geography. In the Dorotheen-Schule, Cöpenick, the writer attended a fascinating lantern lesson on the physical geography of South America. Occasionally, arrangements are made for showing the pupils films dealing with agricultural and manufacturing processes, life in foreign countries and natural phenomena, such as a volcanic eruption. The writer saw some of these educational films at the head-office of the Ufa Film Producing Company, Berlin, and was greatly impressed by their value as an aid to instruction in geography.

The importance of the geography of the home district and Germany is kept in view in all the classes. Even in dealing with foreign countries, frequent reference is made to home geography, it being pointed out in the Prussian *Suggestions* that the pupils cannot gain a realistic knowledge of the geography of foreign countries unless comparisons are made with the local conditions.[1]

A noteworthy feature of the geography lessons

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 368.

which the writer had occasion to watch in German secondary schools was the attention paid to the geological map of Germany in the upper section, geology being employed for explaining the climate and economic conditions and the distribution of population.

The Teaching of History and Geography in Indian Secondary Schools.

The teaching of history and geography in the secondary schools of India is generally unsatisfactory. The chief defects are: (1) the lack of properly qualified and trained teachers; (2) the lack of suitable text-books in the vernaculars; (3) inadequacy of equipment; (4) the lack of correlation with other subjects; and (5) the lack of attention to independent activities on the part of the pupils, such as independent reading and observation and the making of graphs, charts and diagrams. If the Education Departments were to supply the first three needs, a great step forward will have been taken towards the removal of the existing shortcomings in the methods of instruction.

In Indian high schools, history is taught, as a rule, merely with the object of imparting historical information to the pupils. Hardly any attempt is made to develop in them those ideals, attitudes and tendencies to act, which characterise the teaching of this subject in German secondary schools. The study of history has no value either from the point of view of culture or from the point of view of

citizenship unless the pupils are trained to reflect on the events of the past. It is only by such training that they can learn to form independent judgments on the past events and to appreciate the present conditions in the light of the past. Given the right kind of teachers and the right kind of text-books, history teaching in India can do much to promote national solidarity as well as to develop a sense of political responsibility, especially if, as in Germany, civics forms part of the syllabus in history.

As regards geography, there is need for ensuring a more scientific and realistic treatment of the subject in India than is generally the case at present. The pupils should be trained to discover the causal relationships. More attention should be paid to practical and observational work and every effort should be made to bring the instruction in the subject into as intimate a relationship as possible with the life, environment and experiences of the pupils. It is important that contact with the conditions of the home district and the geography of India should be maintained throughout the course. In this connection, an interesting statement occurring in the Prussian *Suggestions* may be quoted here :—'It must not happen that a German pupil is better informed concerning a foreign country than his own country'.[1] It is necessary to place similar emphasis in our schools on the geography of India.

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 368.

CHAPTER X

THE TEACHING OF MATHEMATICS AND NATURAL SCIENCES

A. Mathematics

It will be seen from the summary of the mathematics syllabus given in Appendix C that geometry is begun in *Quarta* (7th school year), algebra in *Untertertia* (8th school year) and trigonometry in *Obersekunda* (11th school year).[1] But all the four branches of mathematics—arithmetic, algebra, geometry and trigonometry—are closely interwoven and taught as a correlated unit. The standard in algebra and geometry in the upper section corresponds more to the standard demanded for the Intermediate Examination than to the standard of the Matriculation Examination in India.

The chief aim of teaching mathematics in German secondary schools is to develop the power of the pupils to apply correctly in independent work the ideas and knowledge which they have gained. Accordingly, the application of mathematical knowledge to the practical problems of life is emphasised in all the classes. These problems include those of commerce and trade, agriculture, labour conditions and insurance.

[1] In the *Oberrealschule* trigonometry is commenced a year earlier, that is, in *Untersekunda*.

The relation of mathematics with the other subjects of instruction receives due attention. The history of mathematics and its relation to general cultural development as well as the importance of mathematics as a science and its influence on life are discussed in the upper section. The pupils of the upper section are also encouraged to read the lives and works of eminent mathematicians.

Teaching of Mathematics in Indian Secondary Schools.

Many of the defects in the teaching of mathematics in India are due to the disregard of the three principles mentioned above—viz., co-ordination between the various branches of mathematics, application of mathematics to the problems of actual life and correlation of mathematics with the other subjects of instruction. The practice in many schools is to treat arithmetic, algebra and geometry as independent topics and to entrust them to different teachers. The value of instruction in algebra will be greatly enhanced if its connection with arithmetic is kept in view from the very beginning, and throughout the course 'the fundamental principles of algebra are treated as a summary of the knowledge acquired in arithmetic instruction'.[1] The chief reason for

[1] Vide *Suggestion for the Courses of Study of the Secondary Schools of Prussia.* (*The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 403).

the usual lack of the pupils' interest in mathematics is that the instruction follows abstract, instead of concrete lines. The teachers are apt to forget that the ability of the pupils to work long and intricate sums is not so important as their ability to apply the knowledge of these subjects to the actual conditions of every-day business life. The emphasis on practical work has tended to improve the teaching of geometry in recent years, but even now sufficient practice is not given to the pupils in actual measurements and in the use of the rule, the compass and other instruments. Finally, there is need for greater co-operation between the teachers of mathematics and of the other subjects of the curriculum, especially nature study, drawing, science and geography.

B. The Natural Sciences

The principal feature of the course of studies in the natural sciences is the harmonious union of all such subjects as are comprised in the natural sciences, viz., botany, zoology, geology, astronomy, physiology, physics, chemistry and hygiene. Biology is taught in the lower section of all types of schools and, in addition, in O II (11th school year) in the *Gymnasium* and *Realgymnasium* and in U II, U I and O I in the *Oberrealschule* and *Deutsche Oberschule*. Physics is begun in the middle section, while the study of chemistry is confined to the four highest classes.[1]

[1] For a summary of the Science syllabus see Appendix D.

Main features of Methods of Teaching the Natural Sciences.

1. The individual experiments of the pupils and their observation of the local natural phenomena form the centre of instruction. Practical work in botany is conducted in the school garden, as far as possible. Where suitable natural objects are not available, pictures and models are used. Many schools possess excellent collections illustrative of the various departments of the natural sciences.

2. Great importance is attached to the written exercises of the pupils and to reproduction in drawing of what they have observed.

3. Special notice is taken of the application of physics and chemistry to technical trades, and educational excursions to workshops are frequently organised in this connection.

4. Not only is the interrelationship of the various branches of the natural sciences always carefully observed, but, wherever necessary, each of these is correlated with the other subjects of instruction; for example, physics with mathematics, drawing and geography; biology with history, geography and drawing.

The Teaching of Science in Indian Secondary Schools.

For a long time science occupied a subordinate place in the curricula of schools in India. Science included only chemistry and physics, which were

studied more or less as abstract and theoretical subjects in the high section, and were subjects for the public examination only for those pupils who took them up as their optionals. It is gratifying that, realising the important part which science plays in modern life, the educational authorities in the various parts of India have recently taken steps to make science a compulsory subject for all middle and high schools and to include under science physiology, hygiene and biology, in addition to chemistry and physics.

Instruction in science is really supposed to begin in the primary schools in the form of nature study ; but owing to the defective way in which nature study is treated in the primary classes, the pupils get hardly any grounding in the study of science. The first essential for placing the teaching of science on a sound basis is, therefore, to improve the instruction in nature study in the primary schools and to ensure that the subject is treated in as practical a way as possible, with the environment of the pupils as the centre of instruction. With the introduction of science in the middle schools, it will be necessary to provide them with the necessary science apparatus. The high schools in H. E. H. the Nizam's Dominions generally have sufficient apparatus for demonstration purposes, but with the exception of the first grade high schools, they lack facilities for making individual boys do practical work independently.

A very healthy tendency which has been noticed

during the last few years in the high schools and colleges in India is the rapidly increasing number of students who choose science as their optional subject. But the study of science is useful from the point of view of economic and social progress only if the subject is taught with emphasis on practical work and with due regard to its application to every-day life. It is not enough to give the pupils a knowledge of science ; it is necessary to aim at developing in them a scientific attitude towards life.

CHAPTER XI

DRAWING AND MUSIC

A. Drawing

Drawing is taught for two periods a week in all the classes. The aim followed in teaching drawing is to develop the powers of observation and expression of the pupils so as to lead them to appreciate form and to seek expression through form. The materials selected for drawing are generally those relating to the range of experience of the pupils, who are trained to reproduce in rapid sketches the results of their observations. The programme of work in each class is closely correlated with the course of study in other subjects, especially mathematics, geography and the natural sciences. The drawing teachers make good use of the school garden for teaching nature drawing and correlating drawing with nature study. The monthly excursions also give them opportunities of making the instruction in drawing realistic.

In many schools the programme of work in drawing includes manual training, and the writer saw excellent specimens of cardboard work and bookbinding in some of the secondary schools which he visited in Germany.

The Teaching of Drawing in Indian Secondary Schools.

Drawing is one of the worst taught subjects in Indian high schools, especially in the high schools of H. E. H. the Nizam's Dominions. Very little is done to develop art appreciation among the pupils. Nor is the importance of correlating drawing with other subjects sufficiently realised. The chief cause of the defective teaching of drawing in our high schools is to be found in the low qualifications of the drawing masters. In German secondary schools the drawing teachers are usually *men* of university education with the same status as the teachers of other subjects. To improve the instruction in drawing in Indian high schools, it is necessary to demand, besides adequate qualifications in drawing, general educational qualifications of at least the high school standard.

B. Music

There is no country in the world where the appreciation of music is cultivated more than in Germany. There is provision for instruction in music in all types of schools, and special attention is paid to this subject in the girls' schools. The general aim of teaching music is 'to develop feeling, imagination and a desire for a power of musical creation'. Music is thus 'to serve the whole training of personality as well as ethical education'. The *Suggestions* issued by the

Prussian Ministry of Education call special attention to the important part played by music in the life of the individual and society and declare that 'music is not the affair of an individual group but a source of elevation and joy for all classes of people'.[1]

In many schools boys who are specially gifted in singing form the school chorus, while those who can play on musical instruments form the school orchestra. The chorus and the orchestra practise at least once a week and give a performance whenever a school festival is celebrated. The most important annual festival is the festival which is held in every German school on the 11th August to celebrate the anniversary of the German Republic. The anniversaries of the deaths of eminent German poets, artists and men of letters are also celebrated in all the schools in accordance with the instructions of the Ministry of Education of the State concerned. On these occasions, as well as at the annual sports and prize distribution of each school, the chorus and orchestra of the school render valuable assistance.

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 419.

CHAPTER XII

EXAMINATION SYSTEM

Before admission into a secondary school, there is generally an oral test which is conducted by a committee composed of an equal number of teachers from the elementary school where the child has received his early education and from the secondary school to which he seeks admission. The director of the secondary school acts as the chairman of the committee. This test is mainly a test of intelligence designed to discover the fitness of the pupil to receive secondary education. Where the director of a secondary school is completely satisfied with the standard of an elementary school, the entrance examination can be entirely dispensed with. As has been already stated, Prussia recently has gone so far as to abolish this test altogether.

After entering a secondary school, the pupil is promoted annually from class to class up to *Untersekunda* according to the judgment of his teachers. In all six-year secondary schools, and in some States in the nine-year secondary schools also, there is at the end of *Untersekunda*, i.e., at the age of 16, an examination called the *Obersekundareife* (ripeness for admission to *Obersekunda*). One of the conditions of admission into the senior

commercial and technical schools is that a candidate must have passed the *Obersekundareife*. A similar examination is held in the middle schools at the end of the 6 years' course and is known as *Mittlerereife*.

The most important examination is the *Abiturienten Examen* (Leaving Examination), or as it is more commonly called, *Reifeprüfung* (Maturity Examination), which was first established in Prussia about 150 years ago. It is taken by the students of the 9-year secondary schools at the end of the full secondary course, i.e., at the age of 19. *Reif* means mature or ripe and *Prüfung* means examination. The examination is called *Reifeprüfung* because those who pass it are considered to be ripe for admission to the universities and to the commercial and technical colleges of university rank as well as for entry into certain forms of employment.

The *Reifeprüfung* differs fundamentally from the type of examinations existing in other countries. The universities have nothing to do with this examination. Nor is it a common examination for all the high schools, as each high school holds its own examination. The Examination Board includes, besides the headmaster and teachers of *Oberprima*, the Inspector of Schools, who is generally the chairman, though occasionally the headmaster may be authorised to act as chairman and representative of the State. The procedure to be followed is laid down in the official regulations. All the members of the

Board are expected to have acquainted themselves beforehand with the proficiency of the candidates in the various subjects. Just before the examination, the master in each subject reports to the Director on the work of each candidate in his subject throughout the year, classifying the work as 'Very Good', 'Good', 'Satisfactory' or 'Unsatisfactory'. After discussing the case of each candidate, the Board decides by vote whether he should be allowed to take the examination or not.

The examination is partly written and partly oral, the oral examination being held after the written work of the candidates has been valued. In recent years a physical test has also been instituted. For the written examination, each teacher of *Oberprima* submits to the Director a list of questions in each subject. After going through these questions and making, in consultation with the teacher, such alterations as may be necessary, the Director forwards them to the Inspector for his approval. The Inspector may, of course, make changes if he thinks that the questions do not come up to the required standard or are defective for some other reason. But this is rare and, in the last analysis, the examination is controlled by the teachers. The Director and the teachers are bound in honour to keep the questions for the examination strictly confidential, and experience has shown that they never abuse the confidence reposed in them.

The written examination includes German composition and mathematics in all the schools,

translation from Greek and Latin into German in the classical *Gymnasium*; papers on Latin and one modern foreign language in the *Realgymnasium*; a paper on one modern foreign language and chemistry, physics or biology in the *Oberrealschule* and a paper on one modern foreign language and history or geography in the *Deutsche Oberschule*. In translating from a foreign language, candidates are allowed the use of lexicons. Another interesting feature of the examination is that, in exceptional cases, a candidate is permitted to present a thesis written by him on some phase or aspect of one of the examination subjects, in which case he is exempted from the paper on that or some allied subject at his choice. The thesis must represent solid individual work covering a year. It is not popular, for its preparation involves much private study and home-work, besides regular participation in the free activity group. Not only for the thesis, but even for the oral examination, a candidate may select a subject in which he has specialised. The Board of Examiners choose the other subjects, which are generally those in which the candidate has not done well in school work and in the written examination.

At the end of the examination, the Board of Examiners consider fully the case of each candidate. They base their final decision partly on the candidate's record in the school and partly on the result of his written examination and oral test. Successful candidates receive a certificate, called

Reifezeugnis (certificate of ripeness), signed by the members of the examining committee. This certificate shows the proficiency of the candidate in the different subjects, including physical education, and states whether he has passed the examination satisfactorily, well or with distinction. It may also contain remarks on any outstanding merit in his work.

The purpose of the examination is not so much to test the extent of the candidate's information or stock of knowledge as to test his personality and all-round capacity, particularly his power to acquire further knowledge for himself and to cultivate judgment on entering a career or joining a university. 'The most outstanding principle observable in the present German system of record keeping and examination', declare the authors of the *New Education in the German Republic*, 'is that any fair estimate of an individual should attempt to evaluate him as a total personality. It is a definitely abandoned notion that the measure of an individual is the sum total of his separate abilities and capacities. German educators hold that an individual is to be understood only as a dynamic unity or a complete personality'. Consequently, unlike the Indian system of examination, the German system avoids memory tests. What counts is the ability of the candidate, which is judged not merely by his answer papers, but by his school record. At the same time, he is given an opportunity of proving his special talents; his strong points being taken into consideration no

less than his weak points. Above all, he is examined not by outsiders who do not know him at all, but by those with whom he has come into daily contact and who are acquainted with the limits of his powers and are able to differentiate between what is important for him to know and what is not. Thus the German system is free from many of the evils associated with examinations in other countries, and especially in India.

The merits of the German system of examination have been well described by J. E. Russell in his book *German Higher Schools*. This book appeared in 1910. Since then, not only have the German high schools been reorganised, but changes have been introduced in the 'Maturity' Examination to make it more perfect. Therefore, Russell's remarks apply with greater force to-day than they did two decades ago. He says, 'There could scarcely be a better system of examinations for secondary schools than that which has been worked out in Germany. If one does not find oneself in full sympathy with it on its theoretical side, one is forced to acknowledge its superior excellence in its practical workings, especially when it is contrasted with the prevailing systems in England and America. It is not a lash held over scholars to make them work the harder, nor does it convert a youth into a mere machine for grinding out facts on demand. It allows full play to the individuality of pupil and teacher, and gives both every opportunity for performing the best possible service. It leaves

the teacher free to devote his best energies to the mental-spiritual development of his charge, without the suspicion that some one may come in, wholly ignorant of the character of his pupils and of his course of instruction, to test them on what might be the veriest non-essentials. It gives free scope for the best teachers to work out their problems in their own way; it sets a standard below which the poor teachers dare not fall; in short, it accomplishes all that any system of examinations could be expected to do, while it is free, at least in its practical workings, from the evils incident to the popular methods of this country'.

That the German system of examination is fair to the pupils as well as their teachers cannot be denied. But it has one weak point: as each school has a separate board of examiners composed mainly of the class teachers, the maintenance of a uniform standard under this scheme is rendered difficult. Neither the presence of the Inspector of Schools on the examination committee nor the practice of the exchange of question papers among different schools appears to be a sufficient guarantee against a variation of the standard from school to school.

In recent years provision has been made in Prussia for giving an opportunity to specially gifted young men and women who have left school before finishing the nine-year course in a high school but who have continued their studies privately in any subject, to proceed to a university without the Leaving Certificate. The condi-

tions for the admission of such aspirants to a university are as follows :—

(*a*) A candidate must not be below 25 nor above 40 years of age.

(*b*) He must produce some trustworthy testimony to the effect that he is able to follow university lectures in the subject chosen by him.

(*c*) The application for admission must be made not by the candidate but by persons having personal knowledge of his accomplishments and competent to judge his ability.

(*d*) He must have achieved distinction and produce admissible results in the occupation in which he has been engaged.

There is an examination office for considering the applications which are received. Such applications as are approved are passed on to an examination committee, which decides the case of each candidate after personally interviewing him and giving him in the subject for which he seeks admission one or more written exercises to work out.

CHAPTER XIII

PHYSICAL EDUCATION

One of the most remarkable post-war developments in the German educational system is the entire reorganisation of physical education. It is true that physical training was compulsory even before the War, but its scope was limited, the time devoted to it was insufficient and the physical instructors were inadequately trained. The pupils took little interest in the formal drill and gymnastics which they were taught for two or three periods a week, while out-door games were rarely played.

After the War, however, the abolition of compulsory military service and the deterioration of the health of the population, as a result of the shortage of food, brought home to the governments of the various States the imperative need for giving greater weight to physical education in schools. In 1921, a Federal Conference on Physical Education was convened, and between 1922 and 1924 active measures were taken by the various States to improve the facilities for physical education and to place it on a sound and scientific basis. These measures included the creation in each State of a department of physical education in the Ministry of Science, Art and

Education, provision of playgrounds, supply of the necessary apparatus for the gymnasiums, lengthening of the period of training in the physical training institutions, enlargement of the scope of physical education, increase in the number of periods for physical education in the school time-table, prescription of weekly play afternoons and monthly excursions and the inclusion of a physical test in the 'Maturity' Examination.

Physical training is compulsory both for boys and girls in all types of schools in Germany. In addition to two or three weekly periods of physical exercises in the school, one afternoon a week is devoted to sports and out-door games. The physical education programme provided for on the school time-table is further supplemented by school excursions and school journeys. When a school journey is organised and the students go to stay at a Country Home or Youth Hostel for several days, they get excellent opportunities of undertaking country walks, playing games and doing physical exercises.

According to the *Suggestions* issued by the Prussian Ministry of Education, physical training has a double objective, viz., (1) to advance the whole bodily development, and especially to strengthen the health of the pupils, and (2) to contribute to the training of character and personality. 'Its ideal goal is the man, healthy in body and soul, joyful and full of life, efficient, and harmoniously developed, possessing the desire to find his place in the community and thus educated for

obedience, as well as leadership'.[1] Acting on this principle, the teachers as well as the pupils in Germany treat physical education as seriously as the intellectual side of school work. So great is the importance attached to physical education now that, in addition to a physical test being included in the 'Maturity' Examination, the senior physical instructor of each secondary school has been made a member of the examination committee.

Most of the schools which the writer had the opportunity of visiting in Germany had well equipped and spacious gymnasiums. Where a school does not possess a gymnasium or drill shelter of its own, it shares the gymnasium of another school situated in the same locality. The apparatus for gymnastics is generally fixed permanently in the gymnasium. Apart from apparatus work, the gymnasium is used for drill and smaller games, for, though it is the aim of the education authorities that physical exercises should be conducted in the open, at any rate, when the weather conditions permit, the play-grounds are generally so small that only a limited number of pupils can be accommodated there.

Training of Physical Instructors.

Before the War, aspirants for the post of physical instructor in a secondary school received

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. 434.

a year's training in a physical training institution and the qualifications for admission were no higher than the possession of the elementary school certificate. But now university qualifications and a much higher standard of training are demanded, precisely as in the case of the teachers of other subjects. After passing his 'Maturity' Examination, the intending physical director joins the university, where he studies physical education and two other school subjects, such as English and French, history and geography or mathematics and science, the idea in making him study two other subjects being that when, after entering service, he is at any time prevented by age or physical weakness from discharging his duties as physical instructor efficiently, he may be able to do the ordinary teaching work in the school.

The university course in Prussia comprises the theory as well as the practice of physical education. The theoretical subjects are anatomy, physiology, hygiene, psychology, ethics, pedagogy and the history and social importance of sports. From the very beginning of the course, ten hours a week are devoted to practice—six hours to athletics, games and bodily exercises, and four hours to swimming and rowing. The student is examined in rowing and swimming at the end of his first year, and in the other subjects of practice at the end of his third year. He then appears in the *Staats Examen* (state examination) at the end of his fourth year, and,

in addition to the theory of physical education, he is examined in the two other school subjects which he should have studied at the university.

In Berlin, there is a physical training college with the rank of a university. It adjoins the Stadium or the sports ground, where the students get a splendid opportunity of practising swimming, games and athletic exercises.

Physical instructors holding university qualifications have the same status as teachers of other subjects in the secondary schools; but, as it is not long since the new regulations regarding the training of physical instructors were introduced, the supply of university trained physical instructors is, at present, still somewhat limited. In carrying out the new programme of physical education, especially remedial exercises, many schools are, therefore, handicapped by the lack of qualified instructors. It is, however, expected that, in course of time, the older type of physical instructors will be replaced by men of university qualifications.

In the elementary schools, physical education is entrusted to the members of the ordinary teaching staff. Arrangements have been made in the pedagogical academies for giving the future elementary school teachers the requisite training in physical education. There are also physical training schools, where short courses are especially organised for elementary school teachers.

Scope of Physical Education.

Detailed suggestions as regards the kinds of physical training exercises suitable for the pupils in the various stages of development have been issued by the Prussian Ministry of Education.[1] The programme of physical training recommended for secondary schools in Prussia comprises the following features :—

(1) *Bodily exercises,* for example, walking, marching to music, walking on the toes, hopping and jumping, running, posture exercises, breathing exercises and balancing exercises.

(2) *Activities involving Skill,* for example, jumping, throwing the baseball, climbing up ladders, vaulting, parallel and horizontal bars, floor exercises.

(3) *Games,* including basket ball, handball, football and volley ball.

The bodily exercises mentioned above are adjusted to the physical characteristics of the pupils in the different classes. Pupils prevented by their health from taking part in the group activities are given less strenuous, and, if necessary, remedial exercises. The floor exercises recommended for the upper section include wrestling, skating and folk dancing. Swimming is compulsory in schools which have facilities for it. In schools situated on the sea or on a river, as well as in schools possessing swimming pools, the aim

[1] Vide *The Reorganisation of Education in Prussia* by I. L. Kandel and Thomas Alexander, p. (?)

is that no child shall leave school without having learned to swim. In towns where the conditions are favourable, rowing is encouraged among the pupils of the upper section in the secondary schools. Rhythmic exercises and dancing receive special attention in the girls' schools. While doing the physical exercises, boys as well as girls wear special light clothing (white vest and drawers or dark blue swimming costume) allowing free movement.

In recent years, the activities of German schools in the field of physical education have manifested two healthy tendencies. In the first place, as in England, America and Sweden, greater stress is now laid on posture exercises and athletic sports and less on exercises requiring the use of special apparatus than was formerly the case. The posture exercises taught in German secondary schools include movements imitating such tasks as lifting weights. Attention is also paid to correct posture in walking, running, jumping and rowing. Secondly, the importance of games and other physical activities which help in the development of *esprit de corps* among the students has been fully recognised. Boys as well as girls take much delight in playing games. Apart from 'faustball' (fistball) and certain other German games, the popularity of football, volley ball and handball has increased enormously in recent years.

There is a growing demand in Germany for giving physical education to all pupils for at least

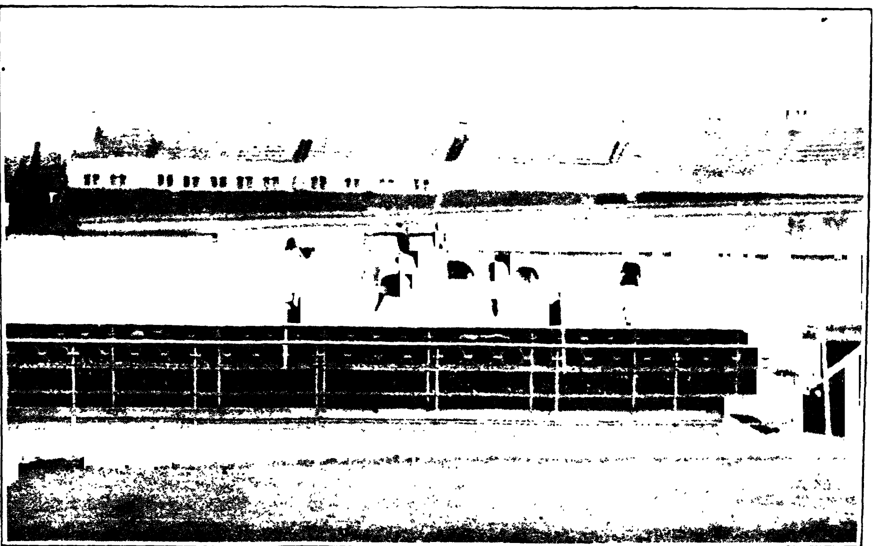
one period every day. The educational authorities fully recognise the need for this reform, but, at present, they are unable to introduce it because, in the first place, there is a woeful lack of adequate playing fields, and, secondly, the school time-table is already too heavy. Not satisfied with the facilities for games and sports offered by the schools, many boys join independent sports clubs, which are widespread throughout Germany.

A visitor to Germany cannot fail to be impressed by the tremendous enthusiasm for games and sports of all kinds which seems of late to have possessed all classes of the people. President Hindenburg himself has publicly announced that he looks upon the pursuit of sports as a civic duty. Everywhere in Germany, one sees striking proofs of the prominent part which games, physical exercises and rambling now play in the life of the nation. Nearly all towns provide in the public parks and elsewhere spacious playgrounds with the necessary sports equipment, which are used by the students in the afternoon on working days, and by the general public during holidays and summer evenings. In Berlin, practically every small locality has a special recreational enclosure for children, and it is a very common sight to see little boys and girls of pre-school age playing on the sand pile especially provided in these enclosures. There is hardly any town in Germany which does not possess a public swimming bath. In Berlin, there is a swimming bath where, by a mechanical

device, waves are sent up in the water like those in the rough sea. Where there are lakes, they are used for rowing and water sports. Wherever possible, arrangements are made for sun-bathing also.

Berlin, Munich, Dresden and Cologne have extensive and up-to-date stadium grounds with running tracks, playing fields and swimming pools. Each stadium is also provided with halls for gymnastics and indoor practice, separate changing rooms and shower baths for men and women, accommodation for spectators and a restaurant where light refreshments can be obtained at a very low price. The stadium grounds are used for practice as well as competitions. Occasionally, they are the scene of massed demonstrations of physical exercises organised by a school or a group of schools.

The German towns follow a very liberal policy in regard to the provision of open spaces, parks and sports grounds, because they believe that the money spent on such facilities is more than repaid by the improvement effected in the health of the population. Says Dr. Adenaver, Chief Burgomaster of Cologne, 'I am convinced that the policy of providing open spaces and parks, if it is boldly conceived, is a policy which will pay for itself. I am persuaded that the Stadium which we have constructed has already saved us hundreds of hospital beds. I am convinced that the many people who, with their children, spend day after day in the summer in our public parks and gardens



The Stadium, Berlin

start the winter much healthier and remain physically fit and mentally active. As a result, they save us hospital costs and poor relief. The policy of providing open spaces and parks is therefore a far-sighted policy'. Acting on this principle, the town of Cologne, like many other German towns, has successfully carried out, in recent years, an elaborate programme for the provision of facilities for physical education. The following comparative table will give some idea of the work done by the Cologne Municipality during the period 1919-1930 :—

	1919	1930
Gymnastic Halls	80	93
Open Air Swimming Baths	—	3
Football Fields	12	95
Athletic Sports Grounds	2	30
Circular Running Tracks	1	22
Hockey Grounds	2	6
Tennis Courts	44	96
Cycle Tracks	1	2
Sun Baths	—	1
Extensive Grounds for Displays ...	—	1

Athletic contests have become quite common in Germany. Apart from numerous clubs for special kinds of sports,[1] there is a society called the National Committee for Physical Culture, which, besides publishing useful literature on physical

[1] Since the War, the growth of these clubs has been amazing. In 1928 there were in the whole of Germany 21,122 gymnastic societies with 2,565,666 members; 11,445 athletic and boxing associations with 1,031,233 members; 8,555 tennis, football, hockey, and skating clubs with 1,029,010 members; 10,788 cycling and motor cycling clubs with 515,364 members; 1,440 winter sports clubs with 104,364 members; 2,195 pedestrians' associations with 798,000 members; and 13,351 juvenile sports associations with 1,206,605 members.

education, organises annual contests for young as well as grown-up people and offers prizes to those who attain certain standards of proficiency in the various departments of sports. Such private efforts in the field of sports receive every encouragement and support from the municipalities as well as the State governments. As a result of the attention given to physical culture, not only have the health and strength of the people improved, but Germany has already won a high rank in the Olympic Sports, though it must be borne in mind that the aim in Germany is not the beating of records but the improvement of the general physique of the nation.

CHAPTER XIV

THE YOUTH MOVEMENT

THE recognition of the value of games and sports in the German schools was due, in no small measure, to the influence of the *Wandervögel* (Wandering Birds), a Youth Movement, which had already spread among the students of the secondary schools and the universities before the War. The *Wandervögel* arose as the result of a reaction against the restraints and conventions of town-life and the rigid discipline of the schools. The movement was started in 1890 by Karl Fischer and some of his fellow-students belonging to a *Gymnasium* in Berlin, who sought freedom from the artificial conditions of life in the city and the tedium of the bookish atmosphere of the school by organising country walks, folk-dancing and singing. Similar wandering bands were formed elsewhere, and, in 1904, the *Wandervögel* Association was founded. One-day trips soon developed into long journeys, and, gradually, the members of the *Wandervögel* acquired country homes, or 'nests', as they called them. During the holidays, dressed in shorts and open shirts, the members of each wandering band travelled on foot to their country home, visiting places of interest on the way and sleeping on the bare ground at night. Arriving there, the members lived the simplest possible life, mixing with the

country folk, singing folk-songs, dancing folk-dances, swimming, reading and discussing questions of interest. They had no need for servants, the entire business of cooking, cleaning and washing being cheerfully undertaken by the young students themselves. When they departed, they left their home as tidy as they had found it on their arrival. In this way, the Youth Movement promoted the health of the pupils, fostered among them good fellowship, self-discipline and the spirit of service, taught them habits of self-reliance and self-help, developed their sense of responsibility and, above all, provided opportunities for the expression of personality.

The Boy Scout Organisation, or the 'Pathfinders',[1] as it is called in Germany, is of earlier origin than the Youth Movement. While the Pathfinders' Organisation was formed by adults according to what they considered to be good and useful for the youth, the *Wandervögel* was started by the students themselves according to their own ideals and their own conception of their needs.[2]

The activities of the *Wandervögel* were practically suspended during the War. After the War, the movement disappeared in its original form, but its ideals have remained and, as has been stated in a previous chapter, they have

[1] The aims and activities of the 'Pathfinders' are practically the same as those of the Boy Scout organisations in other countries, though the German Association is not yet affiliated to the international organisation.

[2] Vide *The New Education in the German Republic* by Thomas Alexander and Beryl Parker, p. 17.

powerfully influenced the work of educational reconstruction that was undertaken after the War.

The *Wandervögel* has been replaced by hundreds of Youth Associations with a total membership of nearly 3·75 millions. A number of these Associations has, unfortunately, been formed on a denominational or party basis (for example, the Lutheran Association, the Catholic Association and the Socialist Association); but their aims are more or less common and there is a federation, called the National Council of German Youth Organisations, which helps to establish unity among the various branches and to co-ordinate their activities. The Youth Associations are largely managed by the boys themselves, while the teachers, parents and representatives of the denominations or parties concerned keep in the background and exercise general supervision and guidance. Their activities include games, sports, musical and theatrical performances, folk-dancing, excursions and travel.

Spirit of adventure, love of hiking, love of nature and a strong sentiment of romantic nationalism are characteristics common to all Youth Associations. Wherever one may travel in Germany, one cannot miss meeting parties of young men and women marching merrily with ruck-sacks on their shoulders and occasionally singing their tramping songs. They frequently carry the banner of the Association to which they belong. They thoroughly enjoy their march

through the country, and, after a strenuous day, halt at a *Jugendherberge* (Youth Hostel), where they obtain board and lodging at a surprisingly low cost.

Youth Hostels.

Since the War, a network of Youth Hostels has been established throughout Germany. In 1929, there were about 2,200 Youth Hostels, which accommodated nearly 4 million persons, of whom about 70 per cent. were school children. Some of the buildings now used as Youth Hostels were formerly castles of German princes, some have been newly built in modern style, while others merely consist of two or three rooms in a farmhouse or an inn. There is a hostel at Ludwigstein which was actually built by some members of the Wandervögel, who during their holidays worked as masons, carpenters, joiners and painters and who raised the necessary funds by giving musical and theatrical performances. On the door of every hostel appears the sign *Deutsche Jugendherberge,* German Hostel for Youth.

There is a Central Youth Hostel Association at Hilchenback with branches in all important towns. The sources of income consist of membership fees, sale of publications, boarding and lodging fees, private benefactions and grants from the State and local bodies. There are two classes of members—members over 20 years old and

members of 20 years of age and under. The annual subscription for the former is 5 Marks (5*s.*) and for the latter 50 Pfg. (6*d.*). Every member is given an identity card, which must be produced before he can be admitted into a hostel. The identity card is like a passport and bears the photograph of the holder. For conducted groups and school parties consisting of at least 2 boys or girls and one leader, who must not be less than 16 years of age, the Youth Hostels Association issues a Leader's Pass (*Fuhrerausweis*) costing 25 Pfg. (3*d.*). The other members of the party do not require any pass or permit.

The charges for one night's lodging are, as a rule, 25 Pfg. (3*d.*) for those whose age is 20 years and under, and 50 Pfg. for those over 20 years. Lunch and dinner do not usually cost more than one Mark each. A number of Youth Hostels provide facilities for the wanderers to cook their own food. Some Hostels do not provide bedding, so that the hikers have frequently to carry their own light sleeping packs. Simple living and self-help are the watchwords of all those who belong to the Youth Movement. The members wear very simple dress, eat simple food and, as far as possible, dispense with servants. Each hostel is in charge of a 'Hostel Father', who manages the hostel and sees to it that its rules are strictly observed. Certain rules are common to all hostels : for example, drinking and smoking are forbidden ; boys and girls must sleep in separate rooms or dormitories ; all lights must be put

out at 10 p.m. ; in the holiday season no one should stay for more than one night, unless there are no fresh arrivals expected. The Youth Hostels are places where young hikers or parties of young hikers stay for the night and then pass on. Care is, therefore, taken to prevent their being treated as ordinary hotels.

The writer has the happiest recollections of his visit to the Youth Hostel at Cologne. The building was used as barracks for soldiers before the War. It has a spacious dining hall, a large room for meetings and concerts, a reading room, a library, 35 dormitories, some of which can accommodate about 50 guests each, a washing room attached to each dormitory, shower baths and two kitchens, one of which is used by such boys and girls as may wish to do their own cooking. The majority of the beds are two-deckers, and the hostel can accommodate 1,200 guests at a time. Every nook and corner of the hostel was spotlessly neat and tidy. One was also impressed by the cheerful and friendly atmosphere pervading the whole place.

A large proportion of university students and students of the upper section in secondary schools belong to one youth organisation or another. The school authorities generally recognise the value of these Associations in so far as they promote sports and healthy out-door life and give the pupils such opportunities of self-expression as cannot be offered entirely by the schools ; but they are, nevertheless, apprehensive lest the denominational and

party basis of some of the Associations should place them under the control of sectarian and party groups anxious to acquire influence over the youth of the country for their own ends. It must, however, be said to the credit of the members of the various Youth Organisations that they have so far resisted all attempts on the part of the political and religious parties to capture the Movement.

CHAPTER XV

WELFARE OF SCHOOL CHILDREN

Child Welfare.

GERMANY has an extremely elaborate system of social and medical welfare, which takes account of the minutest details. In each State there is a Ministry of Public Health which has charge of general social welfare, including child welfare, medical care of school children and education of defective and sub-normal children. The principle governing the care of children is laid down in the Federal Child Welfare Law of 1923, which declares specifically that 'every child has the right to care and education for its physical, spiritual and social efficiency'.

To give effect to the above law, the local bodies in urban as well as rural areas have been made responsible for the social and medical welfare of babies and their mothers, young children of pre-school age and children of school age. There is a Welfare Board in every district, each district is subdivided into various sections, and, for dealing with individual cases, each section has a committee, one of whose members must be a physician. These committees carry on their work in close co-operation with the Welfare Boards which take charge of the more difficult cases. There are numerous Advisory Bureaus for young women who have either become mothers or are expecting to become mothers, as well as Child-Welfare

Centres, to which babies are brought for inspection at intervals of from one to three months. Attached to each Child-Welfare Centre, there are Child-Welfare workers who, besides attending to children who are brought to the Centre, visit their homes in order to obtain an idea of the surroundings in which they live. The Child-Welfare Centres also supervise orphan asylums, crèches, kindergartens, day homes for children, children's recreational enclosures, country homes and open-air schools. The services rendered by the Welfare Organisation to needy children are generally free. It even gives monetary assistance to poor children in need of change of air to enable them to go to a home at a seaside or in the mountains.

The Child-Welfare workers are women who have undergone a course of training in Child-Welfare Work. Such training is given to young women above 20 years of age after they have passed the 'Maturity' Examination, or to women who, after completing their course in a *Frauenschule,* have gained practical experience of children for a year. The subjects taught include physiology, hygiene, First-Aid, singing, child psychology and physical exercises.

Care of School Children.

Great care is taken in Germany for maintaining the health and vigour of the school population. The arrangements made in every school for physical education have already been described in

Chapter XIII. Fresh milk is at all times available in German schools, and, during the intervals, it is supplied free to poor students and at only a nominal price to others. In many places, hot lunch is provided for poor children in the elementary schools without any charge. The school buildings are invariably airy and bright and kept so neat and clean that not even a scrap of paper can be seen on the floor, waste-paper baskets being provided in the class-rooms as well as in the corridors.

Medical Inspection.

Children in all types and grades of schools are subjected to medical inspection for which the municipalities and local bodies are made responsible. Big towns have whole-time school doctors and elsewhere there are half-time school doctors. When a child enters school, he is examined thoroughly by the school doctor, who avails himself fully of the information contained in the health record issued by the Child-Welfare Centre which has looked after the child up to the date of his admission into the school. Great importance is attached to this record, for it is recognised that there are certain diseases and constitutional defects which it is impossible to detect at a single examination unless the past history of the child is known. After admission into a school, medical examination is repeated every year, and more frequently, if necessary. There are school nurses to help the doctor in his examinations. In most

schools, a special room fitted with the necessary apparatus is set apart for the school doctor. No fees are levied for medical inspection. Treatment is usually left to the family physician, but, if the parents of a child are poor, he receives free treatment. In any case, the school doctor has to make sure that the treatment which he considers necessary is actually carried out. He is assisted in this task by the school nurses who form a link between him and the families of the pupils.

Throughout the period during which a child attends school, a complete record of his physical development is maintained by the teachers, including half-yearly measurements of height and weight. This record shows what the condition of the child was when he entered the school and what progress he has made since then. In the form prescribed by the educational authorities there are columns for the remarks of the school doctor, the class teacher and the headmaster, respectively. Reports on the physical development of each child are forwarded periodically to the parents.

Besides examining the pupils, the school doctor is required to give his opinion as regards the sanitary condition of the school building—light, heating, ventilation etc.—the size of the classrooms, the suitability of the seats and other matters concerning school hygiene. His advice is also sought for by the physical instructor with reference to pupils who apply for temporary exemption from physical education or who need special corrective exercises. Thus the school doctor's duty

is not merely to prevent and cure disease but to do all he can to promote the physical fitness of the children under his charge. He is expected to acquaint himself with them thoroughly by regular supervision so as to be able at any time to indicate which children are in need of such facilities as school meals and holiday settlements.

School Country Homes.

In recent years, some of the schools in big towns have established hostels of their own in the country, to which they send their pupils for a few weeks at a time. These hostels are known as the *Schullandheime* or School Country Homes. In 1928 their total number was 180. The *Schullandheime* movement has been started by the schools on their own initiative with financial assistance from the parents and the general public. The school country homes are intended for normal children, and not for weak and sickly children, for whom there are other types of homes. Their object is to bring the children into close contact with nature as well as to promote their health. Some country homes have accommodation for two classes and some for only one class. Occasionally, several schools combine to acquire and maintain a country home.[1]

[1] Mention must also be made of the Class Exchange System, whereby a whole class under the charge of a teacher goes to a school in another place for about a fortnight, and a whole class from the latter school is received in exchange. The members of the visiting class attend lessons in the school where they are guests, but they spend most of their time in excursions and sight-seeing.

Unlike the youth hostels, holiday settlements and the country homes maintained by the Welfare Boards, the school country homes are part of the regular school life. They are not for mere holiday use, for a school may send a whole class to its country home for 3 or 4 weeks during term time with two or three teachers. In the country home the school work is carried on without interruption, though it is often found necessary to curtail the regular time-table. As far as possible, the lessons are given in the open-air. The natural surroundings afford the teachers excellent opportunities for putting into practice the principle of self-activity and other new principles of instruction. They are found to be especially helpful in the teaching of nature study, biology, geography and drawing.

The success which the *Schullandheime* movement has attained so far is due to the co-operation of the pupils and their parents with the school authorities. Sometimes, mothers who are free go with their children to contribute their labour in connection with household work and cooking. The pupils take much pride in their country home, and during their stay there, they do all they can to beautify and improve it by personal labour. The teachers are no less helpful and willingly go to live in the country home with their pupils and cheerfully bear the responsibilities involved; for, as a member of the teaching staff of a German secondary school informed the writer, they find that a stay in the country gives them greater

freedom to experiment with new methods of teaching and does the pupils much good in respect of health, discipline and *esprit de corps*. As is to be expected, at the end of their journey the children return to the school with better health and fresher minds than they enjoyed when they started on their journey.

Waldschulen or Forest Schools.

After the War, and as a result of it, cases of weak nerves and weak lungs were found to be very common among school children. *Waldschulen* or 'Forest' Schools were, therefore, opened to enable these sickly children to recoup their health without any serious interruption in their studies. There are several 'Forest' schools in Germany. Those visited by the writer were the two Waldschulen situated close to each other in the pine forests of Grünewald and maintained by the Berlin Municipality. The surroundings of these schools are healthy as well as picturesque. Each school has a large compound full of shady trees, beneath which the teaching work is usually done. There are bright and airy shelters of rustic structure to which recourse is had when the weather conditions do not permit of open-air instruction. Every effort is made to improve the physique and health of the children while they are at these institutions. The means employed in this connection include air-baths, sun-baths, special exercises for the lungs, swimming, suitable games and frequent medical inspection.



By permission

THE WALDSCHULE, GRÜNEWALD, BERLIN

Both the *Waldschulen* mentioned above follow the principle of co-education. One of them is of the elementary grade and the other of the secondary grade. Children of delicate constitution attending the *Volksschulen* are selected by their headmaster in consultation with the medical officer and sent to the Elementary 'Forest' School for the summer term. There is a boarding house attached to the school with accommodation for fifty boarders. The day scholars arrive at the school at 8 a.m. and stay there till 7 p.m. The children are conducted by a teacher from the tramway station to the school in the morning and from the school to the tramway station in the evening. All the teaching work is done in the morning, the afternoons being kept free for rest and play. After going round the school, one was not surprised to be told that there was nothing which the children detested more than the idea of having to leave the school at the end of the term.

The *Waldschule* of the secondary grade works throughout the year like the ordinary secondary schools and not merely during the summer. The school follows the *Oberrealschule* syllabus. All the pupils are day scholars, but they stay in the school from morning till late in the afternoon. In the morning and at 4 o'clock in the afternoon milk and at 1-30 p.m. lunch are supplied to the pupils at cost price, the total food expenses per child approximating not more than 1·50 Marks, or about 1s. 6d. per day. Special care is taken to reduce the strain caused by school work ; each

period consists of only thirty-five minutes and no home work is set. At the time when the school was visited, the total number of pupils on the rolls was 353. The Drawing Master had taken out a class to an attractive spot in the school garden, where the boys and girls were drawing the flower plants with which they were surrounded. Another interesting sight to be seen was a group of children swimming in the large and artistically designed swimming pool of the school. The pupils are so attached to the school that many of them visit it during the holidays in order to play and tend to the plants and animals.

The Director of the above-mentioned school appeared to be quite an enthusiast in the matter of co-education. The educational authorities in Germany do not generally view co-education with favour except in the elementary stage. They consider that co-education is not desirable during the period of adolescence, because the psychological and intellectual development of boys follows a different course from that of girls. The Director of the Secondary *Waldschule,* Grünewald, however, was of the opinion that the advantages of co-education outweighed its disadvantages. He seemed to be convinced that in his own school co-education had produced many beneficial results.

Education of Defective and Sub-normal Children.

There are schools for the deaf and dumb and blind children in all the big cities in Germany.

These institutions are equipped with the best apparatus and staffed by teachers who have received specialised training and acquired the necessary skill for educating deaf and dumb or blind children, as the case may be. The aim of such schools is to give the defective children such training and education as will help them later on to be self-supporting. In the schools for the deaf and dumb children emphasis is laid on industrial training, while music is given a prominent place in the syllabus of schools for blind children.

In many kindergartens, and, sometimes even in the elementary schools, special preparatory classes are organised for children who are normally gifted but whose progress has been arrested by illness or other temporary causes, and for children suffering from defective speech. There are also special auxiliary schools, *Hilfsschulen,* for feeble-minded children. A *Hilfschule* in Berlin, which the writer visited, was better equipped with teaching apparatus than the elementary schools for normal children usually are. The skill and patience of the teachers in giving instruction to the pupils appeared to be remarkable. Much emphasis is laid on manual activities. In the upper classes, the boys are taught carpentry, gardening, and the use of the telephone, while the girls receive training in cooking and house-keeping, the aim being to prepare the pupils for admission into a vocational school after the completion of the primary course. The children are examined medically once a fortnight. The school doctor is

also a psychologist and performs his duties in close co-operation with both the teachers and parents.

The German Museum of Hygiene.

The German Museum of Hygiene at Dresden is a good illustration of the efforts which are made in Germany to spread the knowledge of scientific and rational hygiene. It owes its origin to the First International Hygiene Exhibition held at Dresden in 1911. In accordance with the desire of the founder of the Exhibition, a philanthropist named Lingner, the Exhibition was converted in course of time into a museum with financial assistance from the Reich, the State of Saxony and the city of Dresden. The completion of the present magnificent building of the Museum was the occasion for the inauguration of the Second International Hygiene Exhibition held in 1930. A Third Exhibition of the kind was held in 1931.

The Museum serves as a central institute for hygiene, its object being to arouse popular interest in matters of hygiene and to educate the people at large in the theory and practice of hygiene. The pictures, models and mechanical appliances for illustrating various matters pertaining to hygiene (for example, the anatomical and physiological structure of the human body, the working of the muscular, respiratory and circulatory systems), have been so skilfully prepared and scientifically arranged with charts and explanations that even a visitor who does not know the A. B. C. of Hygiene can understand them without any

difficulty. In the Exhibition, there was a special section for physical education with photographs and charts illustrating the various kinds of games and exercises and indicating good style and correct posture. This section also included a model gymnasium. Other interesting features of the Exhibition were a model hospital, a model youth hostel and a cinema showing films connected with the various sections of the Exhibition.

Attached to the Museum is the Academy of Hygiene, which was established in 1926. The Academy organises public addresses and courses of lectures for teachers, welfare workers, nurses and others interested in social welfare.

CHAPTER XVI

TEACHERS

Training of Teachers.

Teachers of Elementary Schools.

GERMANY has always bestowed great thought and care on the training of teachers. Even before the War, the rule was strictly followed that no one was to be allowed to teach either in an elementary or in a secondary school unless he had received the training required therefor by the educational authorities. The post-war changes in the educational system, described already, have made the question of teachers' training more important than ever. A new type of teacher with wider knowledge, broader outlook and greater initiative was deemed indispensable, especially for the elementary schools. Accordingly, except in Bavaria and Wurtemberg, the old normal schools were abolished and the attainments and qualifications for admission to the new training institutions for elementary teachers raised.

Before the War, the prospective elementary school teachers left the elementary school at fourteen years of age and proceeded at once to training institutions, in which they were entirely segregated and were themselves drilled for six years in the methods of drilling elementary school

pupils. Owing to the comparatively low attainments and immature age of those who joined the normal schools, it was necessary for these institutions to devote considerable time to general education. It was only during the last year of the course that it was possible for them to give the students adequate practice in teaching in the elementary school attached to the normal school. Moreover, the pupils never got an opportunity of coming into contact with the secondary schools and the universities. The result was that they became very much like Prussian drill sergeants, and, although their work afterwards in the elementary schools was very thorough, it was almost inhuman in the strictness of its discipline and the lack of any wide cultural background.

In order to remedy this state of affairs, Dr. Becker, formerly Minister of Education for Prussia, introduced a scheme whereby elementary school teachers have to pass through the entire secondary school course, i. e., to study in a secondary school up to the age of 19, before proceeding to a training institution. Prussia and some other States have established Pedagogical Academies on a denominational basis for the training of teachers of elementary schools. These are training institutions in the real sense, and not merely institutions for general education, though general education is by no means neglected. The course, which extends over a period of two years, includes the theory and history of education, general and applied psychology, school management,

physiology and anatomy, biology, physical education and handicrafts. The intending teachers are required to acquire a thorough knowledge of the subjects included in the curriculum of the elementary schools. Practical training is given in the neighbouring *Volksschulen*. During the first year, the students spend more time in observing others teach than in being engaged in teaching themselves. For purposes of observation they go not only to elementary schools, but to secondary schools and kindergartens as well. They also visit playgrounds, garden schools, open-air schools, experimental schools, vocational schools, hostels and child-welfare centres. Special attention is paid in all the training institutions to the methods of dealing with boys whose mental or physical development is not normal.

At the end of the two years' course there is a written and practical examination, success in which entitles a teacher to teach in an elementary school as a probationer. After he has acquired practical experience for two years, he has to pass a second examination in order to qualify himself for a permanent appointment.

Instead of establishing independent training colleges for the training of teachers of elementary schools, Thuringia, Saxony, Hamburg and a few other States have left the training of such teachers to the universities. The period of training in the training institutions attached to the universities is three years, but in all other respects these institutions resemble the Pedagogical Academies.

Teachers of Secondary Schools.

The arrangements for the training of teachers of secondary schools are more or less the same as they were before the War. Those desiring to become teachers in a secondary school have to pass the *Staats Examen* (State Examination), which requires at least four years of study in a university after the completion of high school education. At the end of his third year at the university, a student may, if he likes and if he can afford it, take the degree of Doctor of Philosophy, but this degree does not exempt him from the State Examination. The course for the State Examination includes German language and literature, pedagogy and philosophy with psychology, logic and ethics and subjects which the candidate expects later on to teach. The last-named are divided into two groups—the language-history group and the science-mathematics group. Every candidate has to take up at least three of these school subjects, two as main and one as subsidiary. Later on, when a student enters service in a high school, he is allowed to teach the subsidiary subjects only in the lower and middle sections. The examination is both oral and written. The Board of Examiners consists of university professors, directors and senior teachers of secondary schools and administrative officers of the Education Department. The members are appointed by the Ministry of Education. Success in the State Examination does not by itself entitle

a candidate to become a teacher ; he has to undergo two years of pedagogical training to qualify himself for service in a secondary school. As the university does not provide any facilities for the study of education in its practical aspects, he receives this training in a seminar attached to a high school. During the first year, besides doing further theoretical work, he learns how to apply to the practical problems of the secondary schools the principles which he has studied. He observes methods of teaching, maintains a diary in which he notes down his daily experiences, writes critical reports of what he sees, and receives guidance and advice from a senior member of the staff who acts as his tutor. In his second year, he gives regular instruction under the supervision of his tutor and the director of the school. At the end of the probationary period, usually at the age of twenty-five, he appears in a further pedagogical examination, written and practical, and, on passing this examination, he is declared eligible for appointment in a high school.

It is difficult to conceive of a more thorough preparation for the teaching profession than is prescribed for intending secondary school teachers in Germany. As a result of four years of special study at the university and two years of practice, they can fairly be expected to have gained not only full mastery over their special subjects, but, what is equally important, the pedagogical skill required for teaching them.

Teachers of Middle Schools.

Intending teachers of middle schools have to pass a special examination after undergoing a course of training either in a Pedagogical Academy for two years or in a university for three years. In addition to pedagogical subjects, they are required to study two subjects which they intend to teach in a middle school. The universities also provide supplementary courses, followed by a special examination, for those who, after having had several years of experience as elementary school teachers, wish to become teachers in a middle school.

Kindergarten Mistresses.

The course of training for kindergarten mistresses extends over a period of either eighteen months or two years. Provision for training such teachers is generally made in the *Frauenschulen.*[1] Each *Frauenschule* has a kindergarten attached to it, where the students get excellent opportunities not only of understanding the child mind but of learning the mothercraft, to which great value is attached in Germany. The compulsory subjects include pedagogy, psychology, hygiene, music, drawing, modelling, needle-work, cooking and physical education. Admission into the Kindergarteners' training class is given to girls who have either studied up to the upper section in a girls' high school or who, after completing the

[1] See page 72.

full course in a *Lyzeum,* have attended a *Frauenschule* for a year.

Salaries of Teachers.

Until quite recently the scale of salaries was as follows :—

A secondary school teacher holding a permanent appointment received a salary rising with biennial increments from about £200 to nearly £340 a year, but to this salary were added the following allowances :—

1. House rent varying between £23 and £60 according to locality.
2. Bonus for wife amounting to about £7 a year.
3. Bonus for children—£12 for each child after the first, for whom there was no bonus.

The maximum salary of a director of a secondary school was about £400 a year, besides allowances. Including allowances, the teachers of elementary schools received, on the average, roughly from £140 to £250 and middle school teachers from £150 to £280 a year.

As a result of the cuts in educational expenditure introduced in 1931, all the salaries mentioned above have been reduced by more than 12 per cent., while, if the new taxation is taken into consideration, the decrease in the income of teachers of all grades of schools amounts to nearly 20 per cent.

The age for retiring is sixty-five. Teachers of all types of schools are entitled to a pension from the State. The pensions granted are very liberal. For example, a teacher who has put in thirty-five years' service can expect to receive as much as 75 per cent. of his full salary.

Total number of Periods of Teaching Work for Teachers.

The number of periods allotted to a teacher in the German schools depends on his age. The strain of teaching work, which was already heavy, has been increased by the new regulations of 1931, which require teachers of secondary schools who are 50 years of age and under, to work for 27 to 28 periods a week, and teachers above that age, to work for twenty-five to twenty-six periods a week. Teachers of elementary and middle schools whose age does not exceed fifty, have to put in thirty-two and thirty periods of work respectively every week.

Women Teachers.

Women teachers are generally given less work and their salaries are also lower. The male element predominates in the teaching staffs of the elementary schools, only twenty-five per cent. of the teachers being women. There are no women teachers in the boys' secondary schools and even in the girls' secondary schools, half the teaching staff often consists of male teachers.

The Central Institute, Berlin.

This chapter would be incomplete without a mention of the *Zentral institut für Erziehung and Unterricht* (Central Institute for Education and Instruction), Berlin, which serves as a centre of educational research and a central bureau of information on educational questions and renders valuable services to the teaching profession. It is a semi-official organisation, having on its executive council representatives of the various States as well as representatives of the Teachers' Associations. The Minister of Education in Prussia is the President. At present, there are only two branches—one at Essen and one at Cologne.

The activities of the Institute cover a wide field. Among them may be mentioned the following :—

(1) It collects information on educational questions from all parts of Germany as well as from foreign countries.

(2) It endeavours to co-ordinate the educational activities of the various German States.

(3) It encourages educational research and gives valuable information and guidance to teachers on new principles of education and new methods of instruction.

(4) It holds conferences of teachers, and organises for them radio lectures, study circles, refresher courses and educational tours in Germany as well as foreign countries.

(5) It maintains a splendid library and a permanent exhibition of teaching apparatus.

(6) It examines the various educational pictures, slides and films which are produced in Germany from time to time and issues official certificates on their usefulness as aids to teaching in the schools. It also organises demonstrations of slides and films of educational value.

(7) It issues reports, pamphlets and booklets from time to time, giving current information on educational developments in Germany as well as in foreign countries.

The Institute renders all these services to the teaching profession free of charge. The library contains 40,000 volumes, while the reading room is supplied with 350 educational journals—German and foreign. The number of books used in 1930 was 5,000.

CHAPTER XVII

CONCLUSION

There is no doubt that the German system of education is not only sound in principle but remarkably efficient in actual practice. This system bears testimony to the organising capacity of the Germans and to their characteristic thoroughness. There is no nation in the world which has a greater respect for knowledge than the Germans, who readily accept the opinions of experts, foreign as well as German, and endeavour to follow them even if they happen to go against their preconceived notions. The German schools, like all other German institutions, are sensitive and responsive to the findings of science, and it is this scientific attitude of the Germans towards all problems of life which has made them a great nation.

In no sphere of national activity are the power of organisation and the scientific attitude of the Germans better revealed than in that of medical and social welfare work. By adopting the measures described in Chapters XIII and XV, Germany has succeeded within less than a decade in arresting the physical deterioration of the children and youths of the country which was brought about by the War, and, still more, by the inflation

of currency and economic distress as an aftermath of the War. Another example is the care that is taken to avoid educational wastage by finding out the aptitude of each pupil and giving him the kind of education for which he is best fitted. In the case of backward children, efforts are made to detect backwardness as early as possible and special methods are employed for educating such children.

The Germans have taken enormous pains in preparing their curriculum, which is not only comprehensive but well adapted to the needs of national life. This curriculum may seem heavy, but it must be remembered that the German schools are staffed by teachers who possess professional skill in the highest degree and are consequently able to minimise the strain on the pupils. No one who comes into contact with German teachers can fail to be impressed by their culture, width of knowledge, sense of duty and patriotism. They come so well prepared that, except during the lesson on reading, they have little occasion to refer to the text-book or even to their notes. Some of the teachers in the secondary schools are experts in their subjects and can claim to be authors of no small repute. The success of the new methods of teaching which have been introduced in recent years, such as the principle of self-activity, free activity group and integrated instruction, is mainly due to the fact that the schools possess highly skilled teachers who know how best to use such methods.

The students in Germany are as anxious to learn as the teachers are to instruct. Habits of industry are inculcated upon them from an early age. German schools have always been noted for their good discipline; but, whereas before the War special stress was laid on submission to the authority of the teachers, now the relations between the teachers and the pupils are of a more friendly character. There is a strong movement for the total abolition of corporal punishment. In Prussia, it has already been abolished for girls altogether and for boys in the two lowest classes, and even in the case of boys in the other classes, it is very rare and never administered for mere deficiencies in work. The introduction of the students' self-government movement also shows that the German conception of school discipline has entirely changed after the War. A quarter of a century ago, Sir Michaael Sadler remarked, 'England lays more stress on the character-forming parts of education, Prussia on the mind-forming parts'. This statement is not true to the same extent today as it probably was before the War. The formation of character and the development of personality are now considered to be as important as intellectual training. The residential system is no doubt still rare in Germany as compared with England,[1] but the teacher's

[1] Owing to the importance attached by the Germans to the influence of the family which they regard as the basis of all education, the residential system is not likely to develop in Germany to anything like the same extent as in England.

influence over the pupils is not confined to the class-room now, as it very largely used to be before the War. The play afternoons, monthly excursions, school journeys and students' organisations give the teachers ample opportunities of coming into intimate contact with the pupils, and, at the same time, they help to develop *esprit de corps* among the latter. The teachers as well as the students are deeply attached to their school and jealous of its honour, prestige and reputation.

Another healthy development that has taken place in recent years is the co-operation of the parents with the schools. All over Germany, Parents' Councils have been formed, which arrange for the parents and teachers to meet periodically to discuss problems of education and the needs of the schools concerned. These councils contribute substantially towards the school equipment. Not long ago, the monthly contributions paid by the parents in one year enabled the Director of a secondary school to buy six microscopes and to construct a special room for biological experiments. Sometimes, parents render personal service on Sundays and holidays and help to beautify the school house. There is an instance of two elementary schools in Hamburg, where the pupils' fathers, who are all working people, contributed over 1,000 hours of labour to provide the schools each with a country home, while the mothers contributed their share of the labour for purposes of tidying and decorating the home.

The most important lesson which Germany offers to other countries, and especially to India, is that, if a nation wishes to live honourably, it must consider no sacrifice too great in the cause of educational progress. It is remarkable how, in spite of her utterly crippled finances, Germany has succeeded not only in keeping up her educational efficiency, but in developing it in several important directions so as to bring it into line with present-day needs. Believing, as they do, that education is a sound investment and the most effective means of material and moral progress, and that, if their country is to rise again it can do so only through education, the Germans have cheerfully made all the sacrifices which they have been called upon to make for it. But, so high is the educational ideal in Germany that even these heavy sacrifices have not proved sufficient to bring complete satisfaction to the educational authorities and to enable them fully to carry out their aim and policy. The work of educational reconstruction begun after the War has been seriously interrupted by the present world-wide economic distress, from which Germany is suffering more than any other country. Financial difficulties have compelled the educational authorities all over Germany to dispense with the services of thousands of teachers. In Prussia alone three thousand teachers have had to be removed recently. As regards the teachers whose services have been retained, they have not only suffered a serious loss in their salaries, but they have been called upon

to do extra work. Yet, they do not grumble. On the contrary, realising that retrenchment has affected other departments of the State even more than the Education Department and that it is upon the patriotism of the teaching profession that the maintenance of the high educational efficiency of Germany depends, they are determined to work harder than ever, so that it may not be said of them that they failed their country in its hour of need.

The changes which the system of education in Germany has undergone from time to time have been brought about by the varying needs of the different periods. We cannot altogether copy that system in India, and we should not, because our social and economic conditions are fundamentally different from those obtaining in Germany. Our institutions must grow out of our own needs, ideals, traditions and, above all, our own national genius. Still, we can learn much by studying the institutions of other countries. There are many educational problems which we have in common with other countries, and a knowledge of the way in which such common problems are dealt with by progressive nations like England, Germany and the United States is bound to be of great assistance to us in coping with them successfully in our own country.

The most important educational problem in all countries, and especially in backward countries like India, is the problem of mass education. In England, Germany and other advanced countries

where literacy is universal, the problem of mass education is mainly a problem of the maintenance of a proper standard of literacy, which, in Germany, is considered to be so vital that provision has been made for it in the Federal Constitution. In India, in view of the enormous volume of illiteracy prevailing in the country as well as of the appalling poverty of the masses, it is necessary that we should at present confine our efforts to the removal of illiteracy. Until this is achieved, it would be futile to aim at that high standard of elementary education, in which England, Germany and other advanced countries of the West take a legitimate pride.

The history of Indian education during the past 50 years has definitely proved that no rapid advance in literacy is possible in the absence of compulsion. The wastefulness and ineffectiveness of the voluntary system, arising from irregular admissions, unsatisfactory attendance and the premature withdrawal of children from school, have been ably pointed out by Mr. Arthur Mayhew, an authority on Indian education, in his admirable book *The Education of India*. After carefully studying the results of the voluntary system, he has arrived at the following conclusion :—

> India is too poor to afford any further extension based solely or mainly on the present wasteful voluntary system. It may take many years before work on a voluntary system can altogether be abandoned. But funds for extension on a compulsory system must be the first consideration.

The need for introducing compulsory education is now widely recognised in India. All the provinces have accepted the principle of compulsion, but; owing to the inaction of the local bodies to whom the various legislative enactments have left the option of adopting compulsion, so far only 119 municipal and urban areas and 1,571 District Board and rural areas have been brought under compulsion. In the Mysore State also the progress of compulsory education has been somewhat slow for the same reason. While admitting that compulsion is essential to the ultimate success of any scheme of mass education, the Hartog Committee have expressed the opinion that financial difficulties do not make the immediate and universal application of compulsion possible. But the question of funds ought not to present the difficulty which it does at present if, as has been recommended by the Committee, the State takes upon itself the responsibility for primary education. The State should consider no sacrifice too great for freeing India from the reproach of illiteracy.

Once the financial question is satisfactorily settled, not only will the introduction of compulsion be facilitated, but the fear of sacrifice of quality to quantity, which has led the Hartog Committee to propose that improvement should go in advance of expansion, will be eliminated. Many of the defects pointed out by the Hartog Committee, such as unsuitable buildings, insufficient equipment, paucity of trained teachers, low salaries of teachers and inadequacy of the inspecting staff,

exist because the funds required for removing them are not available. As for 'Wastage', on which, it is evident, the Hartog Committee have laid too great a stress, the existence of this evil ought really to furnish an argument for, and not against, the introduction of compulsory education. It is obvious that the premature withdrawal of children from school cannot be stopped without compulsion, nor can improvement in this respect precede compulsion.

In His Exalted Highness the Nizam's Dominions, where, according to the Census of 1921, the percentage of literacy is barely 4, the need for the application of compulsion for a rapid extension of primary education is even more imperative than in British India. A scheme for the introduction of compulsory education in Hyderabad Deccan has already been prepared, and it is to be hoped not only that this scheme will soon be enforced, but that, after a beginning has been made in the capital of the State, the principle of compulsion will be gradually extended to the districts as well. Just as our State has set an example to the rest of India in the sphere of higher education by establishing a university with an Indian language as the medium of instruction, so also should it set an example in the matter of primary education by boldly assuming the responsibility for raising the necessary funds, and *compelling* the local bodies to contribute a definite portion of the cost, instead of merely *permitting* them to levy special or additional rates. Once the principle of compulsion is accepted for

boys, it will be possible to prepare public opinion for its application to girls also, though, in the case of the latter, the advance of compulsion will necessarily have to be slower, owing to the lack of qualified women-teachers and the prevalence of such social customs as *Purdah* and early marriage.

Other important questions connected with primary education in India are the reform of the curriculum and the training of teachers. India is predominantly an agricultural country, and, therefore, the problem of primary education in India is mainly a problem of rural education. It is gratifying to find that in many parts of India, including His Exalted Highness the Nizam's Dominions, efforts are now being made to give a rural bias to the curriculum of the primary schools so as to bring the courses of study in such schools into greater harmony with rural life. For such efforts to be successful, it is necessary that the schools should be staffed by teachers with a rural outlook who possess an intimate knowledge of the conditions of life in the villages. Teachers of urban as well as rural schools should be so trained that they may be able to give, according to the local conditions, a practical turn to every subject of the school curriculum on the principles of self-activity and *Heimatkunde* explained in Chapter III.

It is sometimes advocated that provision should be made in the village primary schools for practical training in agriculture. While there can be no difference of opinion as regards the desirability of teaching nature study and school gardening in the

primary schools, the introduction of agriculture as a technical subject would be contrary to the well-established principle that primary education should limit itself to essentials and disregard what is not indispensable. In India the need for following this principle is the greater because a lapse into illiteracy is a phenomenon too familiar in this country.

A lapse into illiteracy is especially common in the rural areas. Its causes are irregular attendance, shortness of the period of schooling and the lack of opportunities in the villages for continuing the practice of reading and writing. The introduction of compulsory education will considerably minimise, though not entirely eliminate, this evil. For maintaining the gain in literacy, adult schools and libraries will have to be opened in the villages on a wider scale than has yet been attempted.

Besides arresting a lapse into illiteracy and adding to the knowledge of those who are already acquainted with the elements of education, adult education is an effective means of spreading literacy among those who have received no schooling at all in their younger days. If it is desired that illiteracy should be removed from the country as speedily as possible, vigorous measures will have to be adopted not only for bringing under instruction illiterate children but even illiterate adults.

The need for the reform of secondary education in India is no less urgent than that of primary education. The chief defect in our system of secondary education is, as has been pointed out by

the Hartog Committee, that 'it is still dominated by the ideal that every boy who enters a secondary school should prepare himself for the university'. It is not sufficiently realised that the varied capacities of children call for varied courses of instruction. It is to be hoped that steps will be taken before long to give effect to the recommendations of the Hartog Committee in this connection. They have advocated the retention in the middle schools of the boys intended for rural pursuits and the diversion of more boys to industrial and commercial careers at the end of the middle stage. They also suggest that in the rural middle schools the curriculum should be adapted to rural requirements, while in other schools alternative courses should be provided for, preparatory to special instruction in technical and industrial schools. The provision of such alternative courses in the post-primary stage, and especially in the middle schools, suited to children with a practical bent of mind or of literary and scientific ability will help in the solution of the problem of unemployment among the products of our educational institutions as well as tend effectively to raise the standard of higher education.

APPENDIX A

TIME-SCHEDULES

I. Upper Section of the *Volksschule* (Elementary School)

Subject	Boys' School				Girls' School			
	School Year				School Year			
	5	6	7	8	5	6	7	8
Religion ..	4	4	4	4	4	4	4	4
German ...	8	7	6–7	6–7	7–8	7	6–7	6-7
History and Civics.	2	2	2	3	2	2	2	3
Geography ...	2	2	2	2	2	2	2	2
Natural Sciences ...	2	3–4	4	3	2	2-3	3	3
Arithmetic / Geometry	4–5	5-6	5–6	5–6	3-4	4	4	3
Drawing ...	2	2	2	2	2	2	2	2
Singing ...	2	2	2	2	2	2	2	2
Physical Training...	2-3	3	3	3	2	3	3	3
Manual Training ...	2	2	2	2	...	...	...	...
Sewing ...	...	...	...	...	2	2-3	2-3	2-3
Total ...	28–30	30-32	30–32	30–32	28-30	30-32	30-32	30–32

II. Secondary Schools

(a) *Gymnasium*

Subject	Number of Hours in Class									
	VI	V	IV	UIII	OIII	UII	OII	UI	OI	Total
Religion ...	2	2	2	2	2	2	2	2	2	18
German ...	5	4	3	3	3	3	4	3	3	31
Latin ...	7	7	7	6	6	5	5	5	5	53
Greek ...	...	...	...	6	6	6	6	6	6	36
Modern Foreign Language ...	...	...	3	2	2	2	2	2	2	15
History and Civics ...	...	1	2	2	2	3	3	3	3	19
Geography ...	2	2	2	1	1	1	1	1	1	12
Mathematics ...	4	4	4	3	3	4	3	4	4	33
Natural Sciences ...	2	2	2	2	2	2	2	2	2	18
Drawing ...	2	2	2	2	2	1	1	1	1	14
Music ...	2	2	...	...	...	...	...	...	...	4
Total ...	26	26	27	29	29	29	29	29	29	253

(*b*) *Realgymnasium*

Subject	Number of Hours in Class							
	VI–IV as in Gymnasium (common foundation)	UIII	OIII	UII	OII	UI	OI	Total
Religion ...	6	2	2	2	2	2	2	18
German ...	12	3	3	3	4	3	3	31
Latin ...	21	4	4	3	3	3	3	41
First Modern Foreign Language ...	3	4	4	4	4(3)	4(3)	4(3)	27(24)
Second Modern Foreign Language ...	...	4	4	3	3	3(4)	3(4)	20(23)
History (Civics).	3	2	3	3	3	3	3	20
Geography ...	6	2	1	1	1	1	1	13
Mathematics ...	12	4	4	4	4	4	4	36
Natural Sciences.	6	2	2	4	3	4	4	25
Drawing ..	6	2	2	2	2	2	2	18
Music ...	4	...	...	...	...	...	...	4
Total ...	79	29	29	29	29	29	29	253

N. B. The figures in brackets apply when English is the first modern language.

(c) *Reformrealgymnasium*

Subject	Number of Hours in Class									
	VI	V	IV	UIII	OIII	UII	OII	UI	OI	Total
Religion ...	2	2	2	2	2	2	2	2	2	18
German ...	6	5	5	3	3	3	4	3	3	35
Latin ...	...	...	...	...	...	4	4	4	4	16
First Modern Foreign Language ...	6	6	6	5	5	4	4(3)	4(3)	4(3)	44(41)
Second Modern Foreign Language ...	...	...	...	5	5	4	3(4)	3(4)	3(4)	23(26)
History (Civics)	...	1	3	3	3	3	3	3	3	22
Geography ...	2	2	2	2	1	1	1	1	1	13
Mathematics ...	4	4	5	4	4	4	4	4	4	37
Natural Sciences ...	2	2	2	2	3	3	3	3	3	23
Drawing ...	2	2	2	2	2	2	2	2	2	18
Music ...	2	2	...	...	...	...	...	...	...	4
Total ...	26	26	27	28	29	30	30	29	29	253

N. B. The figures in brackets apply when English is the first modern language.

(d) Oberrealschule

Subject	Number of Hours in Class					
	UI-OIII as in Reformreal-gymnasium (common foundation)	UII	OII	UI	OI	Total
Religion ...	10	2	2	2	2	18
German ...	22	3	4	4	4	37
First Modern Foreign Language ...	28	3	3	3	3	40
Second Modern Foreign Language.	10	3	3	3	3	22
History (Civics) ...	10	3	3	3	3	22
Geography ...	9	2	1	1	1	14
Mathematics ...	21	5 + 1 [1]	5 + 1 [1]	5	5	43
Natural Science ...	11	6	6	6	6	35
Drawing ...	10	2	2	2	2	18
Music ...	4	...	...	...	...	4
Total ...	135	30	30	29	29	253

[1] In these classes one hour each is devoted to descriptive geometry.

(e) Deutsche Oberschule

Subject	Number of Hours in Class							
	VI–IV as in Reformreal-gymnasium and Oberreal-schule	UIII	OIII	UII	OII	UI	OI	Total
Religion ...	6	2	2	2	2	2	2	18
German ...	16	5	5	5	5	4	4	44
History (Civics)	4	3	3	2+1	4	3+1	3+1	25
Geography ...	6	2	2	2	2	2	2	18
Mathematics ...	13	4	4	4	4	4	4	37
Natural Science ...	6	4	4	4	4	4	4	30
First Foreign Language ...	18	6	6	4	4(3)	4(3)	4(3)	46(43)
Second Foreign Language ...	...	...	...	4	3(4)	3(4)	3(4)	13(16)
Drawing ...	6	2	2	2	2	2	2	18
Music ...	4	...	...	...	...	...	...	4
Total ...	79	28	28	30	30	29	29	253

N. B. The figures in brackets apply when English is the first modern language.

(f) Reformgymnasium

Subjects	VI	V	IV	UIII	OIII	UII	OII	UI	OI	Total
Religion ...	2	2	2	2	2	2	2	2	2	18
German ...	6	5	5	4	4	3	4	3	3	37
Latin ...	...	...	...	...	8	7	6	6	5	40
Greek ...	...	...	...	...	...	8	8	8	8	32
Modern Foreign Language ...	6	6	6	3	3	2	2	2	2	32
History ...	...	1	3	2	2	2	2	2	3	17
Geography ...	2	2	2	1	1	1	1	1	1	12
Mathematics ...	4	4	5	4	4	3	3	3	3	33
Natural Sciences ...	2	2	2	2	2	2	2	2	2	18
Drawing ...	2	2	2	2	2	...	...	...	...	10
Singing ...	2	2	...	...	...	...	...	...	...	4
Total ...	26	26	27	28	28	30	30	29	29	253

APPENDIX B

Summary of the Syllabus in Geography followed in German Secondary Schools.

Classes in German Secondary Schools

VI	5th School Year. Lowest Class in a secondary school.	
V	6th School Year.	
IV	7th	,, ,,
UIII	8th	,, ,,
OIII	9th	,, ,,
UII	10th	,, ,,
OII	11th	,, ,,
UI	12th	,, ,,
OI	13th	,, ,,

VI. Introduction to the fundamental notions of geography through observation of the local land and water forms. Observation of the local weather, farms, shops, factories. Observation of the daily movement of the sun in the sky, and of length of days and seasons in the home district. Introduction to map study with the making of a map of the school and the neighbourhood as the starting point. A general view of the world map and stories of journeys round the world.

V. The German Republic and the territories where the German language is spoken, such as German Switzerland, German Austria and Holland. The political divisions of Central Europe. Simple astronomical observations pertaining to clouds, position of the sun, phase of the moon and the polar star.

Introduction to the study of the globe—parallels and meridians on the globe and map.

IV. Europe with the exception of Germany, Austria, Switzerland and Holland, with special emphasis on the

Mediterranean countries and *the country whose language is the first modern language to be studied in the school.* General survey of the physical and political geography of the whole of Europe.

Special notice to be taken of typical regions for the purpose of enriching the knowledge of general principles; for example, the artificially watered regions in southern Europe, Mount Vesuvius as the volcanic type and Paris and London as world centres.

UIII. The Continents of the East: Asia, Africa, Australia—with Oceania; the Indian Ocean. The leading events in the history of discovery in combination with instruction in history.

The geographical distribution of the world religions. Elementary notions of ethnology. Development of general principles by means of new regional types; for example, deserts, steppes, tropical forest regions, cultivated areas in the different latitudes.

Mathematical Geography: The apparent paths of the sun in other altitudes. The daily and yearly movements of the earth, Seasons.

OIII. The Western Continents with the Atlantic, Pacific, Arctic and Antarctic Oceans. The economic, political and cultural relations of America with Europe, especially Germany. Continuation of ethnology. Chief trade routes of the world.

UII. Central Europe, with special emphasis upon the causal relationship between physical features and civilizations.

Commercial Geography: Germany's share in the commerce and traffic of the world.

Geography of Germany with the aid of a geological map.

OII. The forms of the earth's surface and their explanation by means of the earth's crust and the effect of natural forces. The climate zones of the earth. The regional zones of the earth's surface and their cultural importance, with the Mediterranean region as the starting point.

Human Geography: The earth as a unit and the home of man. Physical features and their effects on the development of trade and industry, politics and culture.

Evolution and spread of the human race. The human races and their distribution. The stages of civilization found on the earth to-day and their dependence upon the character of the region. Forms of colonisation.

UI. Economic Geography: Regions of food and raw products, export markets, world routes of trade and maritime commerce. Economic geography of the British Empire, France and U.S.A. Transformation of the condition of the soil of Germany as the result of human effort.

OI. Geography of Germany with special reference to the cultural and economic life of the people. Economic relations between Germany and other countries, especially the neighbouring States. Thorough study of the home district. Brief survey of world geography.

APPENDIX C

Summary of the Syllabus in Mathematics followed in German Secondary Schools.

LOWER SECTION.

Arithmetic. The four simple and compound rules. German measures, weights and coins. Decimals.

IV Arithmetic. Simple and Compound Proportion and simple cases of percentage, discount, interest and averages.

Geometry. Fundamental geometric concepts and principles; sides and angles of the triangle; simple triangle constructions; principles of congruency.

Exercises in the correct use of the rule, triangle and compasses. Drawing of parallels, perpendiculars, outline of the cube, etc. Construction of the prism and the pyramid. Measuring of straight lines and angles.

MIDDLE SECTION.

Algebra UIII. Up to simple equations of the first degree.

OIII. Simple and simultaneous equations of the first degree. Introduction to graphs.

UII. Function of $Y = X^n$ and its graphic representation. Square root. Logarithmic functions. Quadratic equations with one unknown.

Geometry UIII. Principles of the quadrilateral. Pythagorean Theorem. Study of Space. Geometric drawing and measurement—the triangular, quadrilateral and polygonal pyramid. Measurement of lines and angles.

OIII. Theory of the circle; chords and angles on the circle.

Geometric Drawing and Measurement—Oblique Cones. Simple oblique solids. Measurement of surfaces.

VII. Proportion of straight lines. Theory of Similarity. Circumference and areas of the circle. Calculation of the simplest solids.

Geometric Drawing and Measurement. Plotting of curves. Approximate constructions, circles. Exercises in surveying.

UPPER SECTION.

Algebra. Equations solved by the use of the quadratic questions. Arithmetic and geometric progressions. Compound interest and annuities. Economic arithmetic. The Binomial Theorem.

Geometry and Trigonometry. Trigonometric functions. Calculations of triangles. Goniometry. Theory of periodic function. Calculation of Solids, area of surfaces and contents of solids. Plane and axis. Spherical trigonometry.

Geometrical Drawing and Measurement. Projection of the circle. Constructions for trigonometric problems. Surveying and levelling. Problems on point, line, plane; conic sections. Projection of the sphere.

N.B. The course for the *Oberrealschule* is more extensive than that indicated above.

APPENDIX D

Summary of the Syllabus in the Natural Sciences followed in German Secondary Schools.

Biology

VI. Plants and vertebrates of the locality. Foreign vertebrates. The external parts of the human body and their functions—Influence of light, air, water and soil.

V. Comparative study of individual blossoming plants of Germany. Parts of the plant and their mutual relationship.

The human digestive, respiratory and circulatory systems and the hygiene of these organs.

Insects. Plants and animal groups in Germany.

IV. Plant diseases, and processes of nutrition and reproduction.

Theory of the cell and its life. Human nervous system, sense organs and their hygiene.

UII and OII. The cell and its life phenomena.

Nutrition of plants and the life processes connected therewith.

Structure and Life of the human body. Hygiene and prophylaxis, alcohol, nicotine and other narcotics. Sex hygiene, importance of physical training, play and sport.

OI. Plant and animal physiology.

A survey of the evolution of the earth and its inhabitants; the development of an appreciation for the scientific basis of evolution.

Physics

UIII and OIII. Mechanics of solid and fluid bodies and gases. Theory of sound. Elementary principles of heat, magnetism and electricity. Theory of light.

OII. Principles of heat with applications to meteorology.

Electricity—Induction, principle of the dynamo. Theory of electro-magnetic currents.

UI and OI. Principles of conservation of energy. Astronomical mechanics. Principles of sound and light.

Chemistry

UII. Mixtures and compounds; elements; chemical process; analysis; structure; reciprocal replacement of elements. Oxidation and reduction. Chemistry of daily life.

OII. (*Oberrealschule*). Introduction to quantitative relationship in chemical changes.

Historical development of the Atomic theory. Mineralogical and geological studies in connection with their chemical compounds. Technical processes important for economic life, e.g., utilisation of nitrogen from the air, glass, and cement.

UI. Analysis, synthesis, substitution, atomic and combining weights. Atomic theory. The importance of the elements and their compounds from the technological and economic viewpoint.

OI. More complicated changes in natural and artificial salts and their acids. The ionic theory. Organic compounds important for technology, economic life, public food and health.

N.B. The course for the *Oberrealschule* in the Natural Sciences is more extensive than that indicated above.

BIBLIOGRAPHY

Germany by G. P. Gooch (1925).

Educational Year Books 1924-9, International Institute of Teachers' College, Columbia University.

The Reorganisation of Education in Prussia by I. L. Kandel and Thomas Alexander (1927).

The New Education in the German Republic by Thomas Alexander and Beryl Parker (1930).

Educational Advancement Abroad by Hearnshaw.

German Higher Schools by James Russell (1910).

The New Education in Europe by F. W. Roman (1924).

Systems of Education by Ziauddin Ahmad (1929).

Board of Education, Special Reports on Educational Subjects, Vol. 9, *The Unrest in Secondary Education in Germany and Elsewhere.*

The Education of India by A. Mayhew.

Indian Statutory Commission Interim Report.

Bureau of Education, India, Occasional Reports No. 4, Furlough Studies, *Modern Methods of Teaching English in Germany* by Nelson Fraser.

Bureau of Education, India, Occasional Reports, No. 13, *Bilingualism* by Michael West.

The Teaching of English in India by H. Wyatt.

Board of Education: *Report on the Education of the Adolescent.*

Newest Europe by Martin MacLaughlin (1931).

Germany and the Germans by Eugen Diesel (1931).

PRINTED AT THE DIOCESAN PRESS, MADRAS—1932. C4151.